

IRAS

Saving the Future

Program and Schedule

The Institute on Religion in an Age of Science

58th Annual Conference, July 28 to August 4, 2012

CONFERENCE STATEMENT

Humanity is fraught with three threats to its very existence; these might be termed the modern “three horsemen of the apocalypse:”

- Unsustainable world population growth.
- Rapid depletion of the natural resources upon which we depend.
- Climate change, believed to be human induced, that not only affects the availability of water, agricultural productivity, and the health of the ocean, but also produces weather disasters.

Ironically, these three horsemen are a consequence of our unprecedented success as a species. Given our numbers and, if unconstrained, our desires, Earth’s resources, once considered to be limitless, are a common good whose depletion increasingly outpaces their renewal. As in a village commons from which those taking outpace those contributing, we are faced with tragedy, but of epic global scope. Our future depends upon reining in these horsemen; justice demands that we do so as peaceably and equitably as possible.

This conference will focus on the ethical, religious, psychological, social and political difficulties in addressing these daunting and thus far intractable problems. We will examine the restraints on humanity’s ability to take adequate action, including human nature, culture, religion, political institutions, and economics.

Optimistically, we will consider and assess recent progress in fostering effective cooperation at local, national, and international levels, and will seek to apply the lessons learned from these efforts.

We will explore

- What the world will be like at the end of this century if we take vigorous action to limit emissions of greenhouse gases and what it will be like if we don’t
- What cultural, psychological, and political factors are inhibiting the taking of such actions on a global scale and what can be done to overcome these inhibitions.
- What can be done to reduce or stop population growth and achieve sustainable use of natural resources.
- What ethical and moral considerations arise from our consumption of hydrocarbons.
- In what ways, if at all, religions, western and eastern, help or hinder the achieving of sustainable economies and civilizations.
- What changes the US must make to bring its carbon footprint and resource consumption in line with other nations.
- What individuals and communities can do to help solve these problems.
- How we can facilitate international cooperation and avoid armed conflicts over access to our remaining resources.

Robert Bercau

V. V. Raman

Conference Cochairs

PRESIDENT'S WELCOME

Welcome, one and all, to our 2012 Conference at Silver Bay, NY.

This will be our first conference experience here, and we have every reason to believe that it will turn out to be as enjoyable a place as the other venues where we have held our conferences over the years: our dear old Star Island and also Chautauqua. As in those places we will be close to the water.

This is one of those rare years when the President is also a cochair for the conference, which has put an additional burden and responsibility on my shoulders. But our very dedicated Roberto Bercau, the other cochair, has done an extraordinary amount of work to put together a conference that promises to be no less meaningful and fulfilling than the many others we have experienced over the years.

The topic is familiar to all of us. Every living day we encounter one event or experience or news-item or other that reminds us that we are living in a perilous period, wrought with many problems with potential for getting worse in the impending decades. During this week we will be listening to speakers who have been giving serious thought to some of these issues. We also have a number of interesting workshops to engage us. The book seminar will discuss Jerald Robertson's manuscript *Substance, Spirit, and Religious Naturalism*, a theme that is close to the heart of many IRASians. The Chapel service will be led by Reverend Richard Gilbert, a much esteemed scholar and minister.

It is my hope that aside from renewing our many friendships, we will also be making new acquaintances in the course of this week. I also trust that when we return to our respective homes we will all be enriched, informed, and wiser as a result of this conference.

V. V. Raman
President of IRAS

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ORIGIN OF IRAS

In the late 1940s the American Academy of Arts and Sciences organized a Committee on Science and Values to address topics relating contemporary scientific knowledge to fundamental human concerns about life's morals and meanings. The Committee, which included astronomer Harlow Shapley, neurobiologist Hudson Hoagland, geologist Kirtley Fletcher Mather, biologist George Wald, and Ralph Wendell Burhoe, the executive secretary of the Academy, stated that "we believe that ... the survival of human society depends on the reformulation of man's world view and ethics, by grounding them in the revelations of modern science as well as on tradition and intuition."

Several from this committee accepted an invitation to bring their views to an interfaith group at the Coming Great Church Conference on Star Island, New Hampshire, in the summer of 1954. Later in 1954, the group from the American Academy accepted an invitation of the Coming Great Church Conference to form the Institute on Religion in an Age of Science, a multidisciplinary society that carried forward the work of both predecessor groups. Other leaders involved in the establishment of IRAS included Brand Blanshard, Edwin Prince Booth, Dana McLean Greeley, Donald Szanthe Harrington, Henry Murphy, Lyman Rutledge, and Malcolm Sutherland. Other early members included Ashley Montagu, B.F. Skinner, Theodosius Dobzhansky, and Ian Barbour.

Since 1954 IRAS has held an annual conference (except in 2007, when the conference was cancelled because of facilities problems) on science, values, and religion. This is the first annual conference held at Silver Bay. IRAS has also conducted—on its own or in collaboration with other groups—conferences in other places: at universities and theological schools and at meetings of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, and the American Academy of Religion.

In 1965 IRAS joined with the Meadville Theological School of Lombard College (later Meadville/Lombard Theological School) to establish a journal: *Zygon: Journal of Religion and Science*. The first issue was published in March 1966 under founding editor Ralph Wendell Burhoe, director of the newly formed Center for Advanced Studies in Theology and the Sciences (CASTS) at Meadville/Lombard. In 1979, when Karl Peters succeeded Ralph Burhoe as editor, the editorial offices moved to Rollins College in Florida. IRAS, the Center for Advanced Study in Religion and Science (CASIRAS, successor to CASTS), and Rollins College became joint publishers. In 1989 the editorial offices moved back to Chicago under the editorship of Philip Hefner, director of the newly formed Chicago Center for Religion and Science (renamed the Zygon Center for Religion and Science in 1999). Willem Drees formally assumed the editorship of *Zygon* on July 1, 2009. Since its founding, *Zygon* has been the chief international voice for the scholarly community in science and religion and has greatly strengthened the influence of the IRAS-CASIRAS approach to relating religion and the sciences.

PURPOSE OF IRAS

IRAS is a multidisciplinary society of persons who seek to understand and reformulate the theory and practice of religion in the light of contemporary scientific knowledge, and to provide a forum for discussing issues relevant to that goal. The IRAS Constitution states the formal purpose as follows:

- (1) to promote creative efforts leading to the formulation, in the light of contemporary knowledge, of effective doctrines and practices for human welfare;
- (2) to formulate dynamic and positive relationships between the concepts developed by science and the goals and hopes of humanity expressed through religion; and
- (3) to state human values in such universal and valid terms that they may be understood by all peoples, whatever their cultural background or experience, in such a way as to provide a basis for worldwide cooperation.

Various other statements of the goals and purposes of IRAS have been articulated over the years. For example, there is one in the back of each *Zygon* which says, "IRAS is an independent society of scientists, philosophers, religion scholars, theologians, and others who want to understand the role of religion in our dynamic scientific world." The lead-off paragraph above resulted from discussions by the IRAS Council before the 2002 Star Island Conference and is intended to make it clear IRAS is open to all persons who share its goals, not confined to an academic or public policy "elite."

Most recently the IRAS Council at its 2003 Midwinter Meeting adopted the "Campion Statement," so-called because it originated from discussions at the Campion Center in Massachusetts at the Council's 2002 Midwinter Meeting:

We at IRAS take the natural world seriously as a primary source of meaning. Our quest is informed and guided by the deepening and evolving understandings fostered by scientific inquiry.

From here, our quests for meaning take us in divergent directions. For some, the natural world and its emergent manifestations in human experience and creativity are the focus of exploration. For some, understandings of the natural world are interwoven with understandings inherent in various religious traditions, generating additional paths of exploration and encounter. As a result, we articulate our emerging orientations with many voices, voices that are harmonious in that we share a common sense of place and gratitude.

We acknowledge as well a shared set of values and concerns pertaining to peace, justice, dignity, cultural and ecological diversity, and planetary sustainability. Although we may differ and hence debate on how these concerns are best addressed, we are committed to participating in their resolution.

IRAS is a nonprofit membership organization. Governance is by a volunteer Council whose members are elected from the entire membership. New IRAS members and tax-deductible contributions are always welcome.

SILVER BAY YMCA OF THE ADIRONDACKS

Silver Bay YMCA of the Adirondacks is a 100-year-old YMCA family retreat and conference center on the shores of Lake George. Silver Bay hosts conferences, family reunions, family vacations, weddings, and team building and leadership training on a 700-acre waterfront campus within the Adirondack Park of New York state.

Silver Bay has a variety of accommodations from private-bath rooms and shared-bath rooms in historic buildings to private cottages located on the periphery of the campus. Silver Bay offers accommodations to fit all groups' needs and budgets.

Silver Bay also offers an array of meeting spaces to fit the needs of your group, ranging from quaint enclosed pavilions and historic halls to a 700-person auditorium. As a courtesy to all conferences and groups, Silver Bay provides standard audio-visual and conferencing equipment and setup at no additional charge.

At the heart of Silver Bay are dozens of activities for all ages. Learn lifetime activities, including archery, boating, crafts, music, nature, and much more.

As a membership organization of 1500 families from the local community, throughout the Northeast and the world, we offer a place for all. As a member of Silver Bay YMCA, you can swim and paddle on one of the cleanest lakes in the world, hike our many groomed trails, or relax on the Inn porch in one of our famous rockers.

As a community outreach organization, we provide services to our regional youth, adults, and seniors through our:

- Afterschool program at the Ticonderoga Middle School
- Youth and Government program
- Youth Music Camp
- Fitness and social programs for youth and adults in the winter and spring months
- Brookside/Trinity Community House Retreat Ministry

GENERAL CONFERENCE INFORMATION

Silver Bay Conference Center is much larger than the venues we have used in the past and we will be sharing it with other groups and families. Their procedures are also significantly different. It is necessary to carry your name tag at all times, because it serves as a pass to meals, our plenary lectures, happy hour, Silver Bay facilities, and recreational equipment.

Silver Bay meals are buffet-style open seating at 7:30–9:00, 11:30–1:00, and 5:30–7:00. It also offers coffee and a continental breakfast from 6:30–7:30. The “official” IRAS meal times are: 7:30–8:30 AM, 11:45 AM–1:00 PM, and 5:30–7:00 PM.

Silver Bay does not allow alcoholic beverages on its campus except at approved events such as our Happy Hour.

Announcements: Because Silver Bay’s dining halls are not suitable for making announcements, they will be made at the beginning of the morning plenary lecture and at the end of the Happy Hour.

Chapel services: Each day begins at 8:30 AM in the Helen Hughes Chapel, with reflections provided by the Rev. Dr. Richard Gilbert and music provided by pianist Jacqueline Schwab and the IRAS Choir, directed by Joyce Gilbert. Choir rehearsals will be daily (except Monday) at 1:00.

Plenary session lectures and discussion are scheduled in the *morning* (starting at 9:30 AM) and *evening* (starting at 7:00 PM) in Morse Hall. The speakers (first hour) will develop the theme of the conference as they address different issues and questions from their own disciplines and perspectives. Following a break with refreshments there will be general discussion. Abstracts and biosketches of the speakers begin on page 7.

The **IRAS seminar** will consider a book in progress by Jerald Robertson, titled *Substance, Spirit and Religious Naturalism*. It will be held on Tuesday, 1:00–1:50 and Wednesday, 1:00–2:50, in the Watson Arts Center. Further information may be found beginning on page 17.

Special Workshop: Terry Deacon will make a presentation on his recent book *Incomplete Nature: How Mind Emerged from Matter* in Morse Hall on Sunday at 1:00. He will be available for questions on Tuesday from 1:00 to 3:50.

Workshops and Discussion Groups will be offered during the afternoon from 2:00–2:50 and 3:00–3:50 P.M. Leaders and workshop locations are listed in the schedule on the back page of this program booklet and workshop descriptions begin on page 18, listed alphabetically by presenter. Other activities such as Meditation, Yoga, and Art are listed beginning on page .

Free University sessions, from 1:00–1:50 each day except Thursday, provide conferees with an opportunity to present their ideas informally and discuss them with others. If you wish to organize such a session, you need to do two things: 1) Check with Steven Gaudet at least the day before for a room assignment, and 2) after doing so, give a written note to Jane Bengtson, editor of the Star Beacon, describing your offering and its time and location. The announcement will appear in the *Beacon* and will also be posted.

Happy Hour takes place at the end of afternoon activities, from 4:30–5:30. We gather informally in the Gullen Lounge for an hour of libations, snacks, socializing, and, often, music. Contributions to cover the cost are both needed and appreciated. Persons under 21 are not permitted in the beverage-serving area. Silver Bay staff will be serving the drinks (soft, beer, and wine only; no hard liquor).

Candlelight services in the Chapel allow time for quiet reflection at the close of each day following the evening-program discussion hour. Each service lasts ~20 minutes.

Memorial Service: A memorial service for IRAS members who have died during the past two years will be held in the Chapel on Friday at 2:00.

Concert: Jacqueline Schwab, pianist and the creator of the music on the Ken Burns programs, will give a concert on Friday at 3:00 in the Auditorium.

Talent Show: The IRAS Talent Show is on Friday evening. If you would like to participate, especially if you have talent (this is an optional requirement; all hams are welcome), Joan Hunter, the talent show coordinator, will be happy to hear from you.

Newspaper: The *Beacon* is an IRAS tradition. This conference newspaper appears at breakfast each morning with up-to-date information on the conference and its participants. It provides opportunities for you to respond to lectures and the conference theme, challenge ideas, publish poetry, commentary, and other forms of artistic expression, including humor, all at the discretion of the editor, Jane Bengtson, and as space is available. Contributions from our younger conferees often grace the pages.

Recreation: Afternoons are also opportunities for recreation: talking, thinking, napping, reading, walking, and playing. Silver Bay's inviting setting offers rich opportunities to renew, refresh, and nurture body, mind, and spirit. Recreational activities abound, including swimming, sailing, hiking, kayaking, canoeing, tennis, yoga, tai chi, archery, nature programs, and volley ball. Monday afternoon has been kept free so that you might enjoy these activities.

Interest groups meet from 3:50–4:30. IRAS has two official interest groups: The Ministry Group and the Religious Naturalism Group.

The Ministry Group includes all who are committed to some form of lay or ordained ministry. It reflects on the issues raised at the conference by science and religion-theology-spirituality.

The Religious Naturalism Group includes all who are committed to placing the natural world at the center of religious experience and the search for value and meaning, whether they do so within a religious community or not. RN affirms that scientific inquiry has revealed a vast emergent panorama of nature, and that nature is both the realm in which we live out our lives and which shapes every dimension of who we are. The group reflects on how the issues raised at the conference might be applied, with a naturalistic perspective, to the participants' shared values and concerns.

Dancing will take place every evening after the candlelight services. Please bring along any favorite CDs you have with you. Genres will range from ballroom to rock, as requested by those who come.

Star-gazing will take place on clear nights and during daylight (looking for sunspots) as well. Check with David Klotz for when and where we'll be holding these sessions.

An informal **farewell party** will be held on Friday night, an important part of which is to use up any refreshing substances left over from Happy Hour.

If you have any **questions or suggestions** concerning the conference, please bring them up with Conference Coordinator Steven Gaudet, or with Cochairs Roberto Bercau and V.V. Raman.

LECTURE OVERVIEWS, ABSTRACTS, AND BIOSKETCHES

SATURDAY EVENING

OPENING PANEL

ABSTRACT

The plenary and chapel speakers will introduce themselves and give brief overviews of their talks.

BIOSKETCH

See the individual biosketches below and in the section on morning chapel services.

SUNDAY MORNING

EARTH'S CHANGING CLIMATE: WHAT'S IN STORE FOR THE FUTURE?

Henry N Pollack

ABSTRACT

Earth's temperature is increasing, ice is diminishing, sea level is rising, and ocean pH is falling, all a direct or indirect consequence of the growth of anthropogenic greenhouse gases in the atmosphere. How will these current trends, and many other phenomena related to these trends, play out in the remainder of the 21st century and beyond? Uncertainties about the climatic future derive principally from two broad areas: uncertainties in climate science and uncertainties in social science. Climate science will benefit from a better understanding of the role of clouds in the climate system, better understanding of ice dynamics in Greenland and Antarctica, better comprehensive climate models for projecting into the future, and better techniques for predicting local consequences. Uncertainties arising in the social and economic arena include population growth, national and international political and economic developments, the pace at which public awareness of the realities of climate change develops, and technological advances in energy production and distribution. Scenarios for the climate of the future, simulated in complex climate models, vary according to the demographic, economic, political, and technological assumptions. The spectrum runs from a "business as usual" scenario, in which no significant reduction of greenhouse gas emissions occurs, to a "cold turkey" scenario, in which all emissions end tomorrow, and several scenarios intermediate to these extremes.

A carbon dioxide concentration in the atmosphere of 450 ppm (parts per million) is frequently mentioned as the

ceiling necessary to limit the mean global warming by the end of this century to no more than 2° C above pre-industrial levels. Already Earth has warmed 1° C above the pre-industrial level. Today the CO₂ concentration is 394 ppm, and increasing by more than 2 ppm each year. The business as usual scenario will lead to atmospheric concentrations of CO₂ of 450 ppm in just 25 years and more than 600 ppm by the end of this century. Such a heat-trapping blanket in the atmosphere will lead to a temperature increase of 2–5° C above the year 2000 global average temperature, with the land surface warming more than the ocean surface and the Arctic experiencing greater warming than the global average. Even the cold turkey scenario shows continuing climate change arising from the greenhouse gases already present in the atmosphere from prior human activity, with a projected temperature increase of 0.6° Celsius in this century. Geo-engineering techniques sometimes mentioned in discussions of climate mitigation include "sun-screen" technologies, in which solar energy is blocked before reaching Earth's surface, and carbon capture strategies, in which greenhouse gases are pulled out of the atmosphere, or prevented from reaching it.

BIOSKETCH

Henry N. Pollack is professor of geophysics (emeritus) in the Department of Earth and Environmental Sciences at the University of Michigan. He has taught at every level of the curriculum, from introductory courses for non-scientists to advanced graduate seminars. His current research focuses on the record of climate change as recorded by the temperatures in the rocks beneath the Earth's surface. Subsurface temperatures comprise an archive of past climate that reveals what Earth was like in the pre-industrial era, thus helping scientists to assess the human impact on Earth's climate. As chair of the International Heat Flow Commission, he coordinated a worldwide research program into geothermal evidence of global climate change. He has traveled widely in the polar regions, to Alaska, Kamchatka, the Bering Sea, the Russian Arctic, Norway, Iceland, Greenland, and more than 20 trips to Antarctica.

Pollack has served on many advisory panels for the National Science Foundation, testified before National Academy of Science and U.S. Senate committees, and provided briefings about climate change to Congress and the White House. He has published widely in scientific journals, was a contributing author to the Nobel Prize-winning Intergovernmental Panel on Climate Change (IPCC) 4th Assessment Report, and is a scientific advisor to Al Gore's Climate Reality Project.

He is an elected fellow of the American Geophysical Union, the Geological Society of America, and the American Association for the Advancement of Science. He authored *Uncertain Science...Uncertain World* (Cambridge University Press, 2003), a book aimed at a nonscientific audience, in which he discusses scientific uncertainty and the role it plays in the formulation of public policy. In it he guides readers through the debate over global climate change, showing how climate scientists work and make progress in an environment of uncertainty. A second book for a nonscientific audience, *A World Without Ice*, appeared in 2009 (Avery / Penguin). In this book Pollack describes the role of ice in shaping Earth's landscape and climate, and the likely fate of the cryosphere in the face of continued anthropogenic warming.

SUNDAY EVENING

A BRIEF HISTORY OF GROWTH AND THE CHALLENGE OF THE FOURTH ERA

Robert Bercaw

ABSTRACT

Americans almost universally believe a 3–4% rate of growth to be an unmitigated good and essential to our economic health. Yet, because we live on a finite planet, growth must eventually stop. In the talk, I will give a short history of growth, estimate how close we are to the end point and outline what may happen when we reach it. It is the task of the conference to explore our options in their scientific, religious and ethic dimensions.

Humanity has passed through two economic eras and the end of the third is now looming. The first, known as the hunter-gather, ended about 10,000 years ago and the second, called the Malthusian era¹, ended near the beginning of the 19th century. The eras were characterized by low rates of population and economic growth in which the standard of living tended to be inversely proportional to the population. These eras were abruptly followed by the Industrial Revolution, which is still progressing. It was and is characterized by high rates of economic growth and, for the first time, a dramatic improvement of the standard of living of the average person. Having prospered for 200 years, we have come to believe that growth is our inherent right. The so-called developing nations did not participate in this boom and, in fact, their standards of living decreased substantially during the era. Most of them are now hurrying to catch up.

The world's population is now at seven billion and climbing at the rate of one billion every twelve years². Almost all of this growth is in the developing nations, but fortunately a number of the more successful ones have been able to bring their birth rates down to near replacement levels. However, most of the countries have

very young populations, guaranteeing their growth as their population ages.

The size of the population is only a proximate problem. The ultimate problem is finding the resources to support that population. Besides the size of the world's population, we must also consider the level of consumption, which varies dramatically from nation to nation and from person to person. The U.S., with just 4.6% of the world's population, consumes 33% of its resource production, and the one billion people in the developed nations consume fully 80%.

The ambitions of countries like China and India to enjoy the western lifestyle give a new urgency to the crucial question of the adequacy of the world's resources. Probably the best answer is still provided by the MIT study for the "Club of Rome" in 1972. Although it was widely derided at the time, it has recently been validated by a comparison with 30 years of actual data. Assuming we follow "business as usual" policies, the study shows that resource shortages will begin impacting the economy around 2020 and the world population will begin to *decline* around 2030.

The talk finishes with a discussion of the options available to humanity and challenges the Conference to devise effective and equitable options.

¹Much of this history was abstracted from Gregory Clark's economic history of the world, *A Farewell to Alms*, Princeton University Press (2007).

²Carl Haub of the Population Reference Bureau was unable to attend the conference, but very kindly provided the materials on population for this talk.

BIOSKETCH

Robert Bercaw served his military tour of duty at NASA's Glenn Research Center, where he was able to continue his research on nuclear and pion physics. He had received a U.S. Army commission during the Korean War and then went on to earn a doctorate in nuclear physics from Washington University, St. Louis in 1962. After his military tour, he continued at Glenn and was made a research supervisor and later a branch chief. Glenn's nuclear program was cancelled due to budgetary cutbacks after the completion of the Apollo Program. Since then he has worked on many technologies, first for President Carter's alternative energy systems program and later for future NASA programs, including computerized data systems, magnetohydrodynamics, space nuclear reactors, lunar and planetary power systems, advanced energetics, early work on the Space Station, and spacecraft and aeronautical electrical systems. He has approximately 80 publications.

After retiring, he is pursuing his interests in evolution, the origins of humanity (and how they shape our current attitudes), the dialog between science and religion, theater, video, and travel. He is the IRAS treasurer, a

member of Council and cochair of this conference. He is married to a successful artist, Ruth B. Bercaw, and has two grown children.

MONDAY MORNING

ETHICS AND SAVING THE FUTURE

Bron Taylor

ABSTRACT

The great American conservationist Aldo Leopold wrote in *A Sand County Almanac*, which was posthumously published in 1949, "No important change in human conduct is ever accomplished without an internal change in our intellectual emphases, our loyalties, our affections, and our convictions. The proof that conservation has not yet touched these foundations of conduct lies in the fact that philosophy, ethics, and religion have not yet heard of it." If Leopold's perception still holds true, the future is looking pretty bleak. Indeed, there is nothing but an impoverished future for our own species if the genetic and species diversity of the planet continues to precipitously erode, as we increase both numerically and in our material appetites. Yet there is evidence of a growing global cultural shift, presaging the philosophical, ethical, and religious revolution, which Leopold thought was a prerequisite to a conservation ethic. Since his own writing has played a key and increasingly influential role in this cultural evolution, I will begin with Leopold's thinking, tracing the narrative, affective, spiritual, and practical dimensions of what he called "The Land Ethic." If Leopold is the grandfather of contemporary environmental ethics, then Rachel Carson is its grandmother, and I will also illustrate affinities between these two great American conservationists. I will then focus attention on some of the implications of their thinking for both everyday practice and our political lives, using the Club of Rome's infamous "Limits to Growth" study and subsequent research examining its models, as a case study. This will underscore the urgency of our current predicaments. In the second of my two presentations at this IRAS conference, I will turn to look at what I have contrasted as "green" and "dark green" religion, and their nascent and prospective roles, in the transformations called for by Leopold, Carson, and many others.

BIOSKETCH

Bron Taylor is professor of religion and environmental ethics at the University of Florida, where he was appointed as the Samuel S. Hill Ethics Chair in 2002. He is also a Carson Fellow at the Rachel Carson Center for Environment and Society in Munich Germany, and an affiliated scholar at the University of Oslo. He holds an M.A. in theological ethics from Fuller Theological Seminary and a Ph.D. in religion (social ethics) from the

University of Southern California. He is the founder of the International Society for the Study of Religion, Nature and Culture, and editor of its affiliated, quarterly, *Journal for the Study of Religion, Nature and Culture*. Dr. Taylor's research focuses on the emotional and spiritual dimensions of environmental movements, and he has led and participated in a variety of international initiatives promoting the conservation of biological and cultural diversity. His books include *Dark Green Religion: Nature Spirituality and the Planetary Future* (2010), the award winning *Encyclopedia of Religion and Nature* (2005), and *Ecological Resistance Movements: the Global Emergence of Radical and Popular Environmentalism* (1995). *Avatar and Nature Spirituality* is expected in 2013. In his former (preprofessorial) life, he served as an ocean lifeguard and peace officer in the California State Department of Parks and Recreation. For more information see www.brontaylor.com.

MONDAY EVENING

IRAS PANEL ON FACTORS INFLUENCING
PUBLIC OPINION

THE TRAGEDY OF THE COMMONS:
BALANCING LIBERTY WITH LAW

Paul Carr

ABSTRACT

William Lloyd (1833), coined the term "Tragedy of the Commons," in which liberty for individual gain led to the tragedy of too many cows grazing on the commons. This is evident today, as everyone is at liberty to burn fossil fuels that pollute our common atmosphere. The "Clean Energy & Security Act" (2009) attempted to regulate carbon emissions, but it was not approved by the US Senate. Those who opposed the bill had faith in libertarian or laissez faire economics. This is based on Adam Smith's "Invisible Hand" (1776), which guides individual gain towards the public interest. Liberty must be balanced by law.

BIOSKETCH

Paul H. Carr, BS, MS, MIT; PhD Brandeis U. The John Templeton Foundation awarded Paul grants for the philosophy courses on science and religion he taught at U Mass Lowell, 1998–2000. This inspired his book *Beauty in Science and Spirit* (2006, IRAS Seminar 2005). From 1967–1995, Paul led a branch of the AF Research Laboratory, which investigated microwave ultrasound and SAW (surface acoustic waves). His over 80 scientific papers and 10 patents have contributed to new components for radar, TV, and cell phones. His home page is www.MirrorOfNature.org.

HUMAN NATURE

Stan Klein

The past year brought an explosion of books on how human nature is ill-suited for Saving the Future. Kahneman and Mlodinow's books examine flaws in how we handle probabilities and in our rational thinking. Haidt's book examines aspects of our human nature that cause problems for a democratic society. An antidote to all the pessimism is an energizing optimism in our human nature discussed in Diamandis & Kotler's book *Abundance*.

BIOSKETCH

Stanley Klein is professor of neuroscience, bioengineering and optometry at the University of California, Berkeley. His present research explores brain mechanisms responsible for visual processing. His earlier research in particle physics with its dualities got him interested in new ways of dealing with the controversies facing our present political system. He is committed to building bridges between science and religion and occupy movements as they evolve to function better together.

CULTURE AND INSTITUTIONS

David Anderson

ABSTRACT

We live our lives entrapped within the many layers of our past culture. This entrapment began far back in time and has worked forward in the broadest sense to the present-day culture of our community and our nation.

How has this affected our attitude toward the ecological problems confronting us? The popular surge of environmental concern that began with the Green Revolution has continued to gain momentum and is now spread around the globe. Professionals from a wide range of scientific disciplines have joined in and are spelling out with precision our ecological problems. They are pointing to the dire consequences if no action is taken. Nevertheless, our institutional response on a national and global level has been largely ineffective. More often than not, governmental measures being taken are piece-meal and half-hearted. Given the seriousness of the scientific forecasts, we are left with the question, why?

David Anderson will attempt to answer that question. He will discuss elements of our culture and institutions that are holding us back from implementation of actions that would enable us to meet the crisis head-on.

BIOSKETCH

David Anderson, a graduate of Dartmouth College, is an author who has brought together during the past ten years in his writings a wide range of interests, namely theology, philosophy, geopolitics, and economics.

For over thirty years, as an international risk manager at several of America's premier multinational institutions, he became increasingly aware of the underlying cultural, institutional and religious causes of world conflict. He has written three books. In them he discusses the origins of this conflict as reflected in the foundations of Judaism, Christianity and Islam.

He has now completed an essay series that call for a new cosmic understanding of the place of *Homo sapiens* on Planet earth; a rooting out of the violence and insatiable greed that is woven into the fabric of the hominid mind, a decontamination of hominid collective consciousness and an ushering in of a new axial age. David goes into detail by examining our culture and institutions, giving emphasis to those that are being supported by our Abrahamic religions. He makes recommendations as to how we can approach a new understanding of our place on the planet and spells out in some detail what is likely to occur if the transformation does not take place. The essay series is available by download on his website www.InquiryAbraham.com.

POLITICAL AND ECONOMIC COMPETITION

Ted Laurensen

ABSTRACT

Competition for resources and for the benefits of economic success and entitlements, both within and between countries, feeds and exacerbates human tendencies to act on the basis of short-term incentives and to ignore larger and longer-term problems that it are beyond the capabilities of any one individual, group, or country to solve. In the absence of effective world governmental mechanisms—the prospects for which are highly doubtful in the short to intermediate run—the most likely mechanism for achieving cooperation is the recognition of the universality of critical problems that can be dealt with only by the development of cooperative mechanisms.

BIOSKETCH

Ted Laurensen practices corporate and securities law in New York City, with a particular focus on investment funds and investment advisers. He is the immediate past president of IRAS and also currently serves as the vice president for development. His other roles in IRAS have included responsibility for newsletter conference write-ups, newsletter editor, Council member, secretary, and co-chair of the 1999 and 2009 conferences. He likes to think his intellectual interests have no boundaries, but they have focused on moral and political philosophy, psychology, and hard science fiction.

ADELAIDE'S LAMENT: EXPLORING OUR
INABILITY TO MAKE RELIABLE SENSE OF
OUR SITUATION

Ruben Nelson

ABSTRACT

In *Guys and Dolls*, Adelaide laments that “the medicine never gets anywhere near where the trouble is.” As a musical number the song is fun. As an insight that too often applies to situations in which we are deeply enmeshed, it is no fun at all. Systemic mistakes tend, at the least, to be embarrassing, painful, and expensive. They can be fatal. In the context of an extended conversation on saving the future, a truly interesting question is this: “Might the dominant geopolitical understandings of our present situation and the future prospects for humankind be fatally wrong-headed?” Put bluntly, “Are our dominant perceptions, plans, and actions to save the future well-intended, but (inadvertently) ill-directed?” If there is any reasonable chance that the answer to these questions is “Yes,” then the content and root assumptions that dominate present geopolitical sense-making, planning, and action need to be identified, explored, and critiqued. A brief version of this task will be attempted. First, we will consider our geopolitical situation and future as these are now predominantly seen by those who walk the pathways of power. Second, the limitations of this imagination of our present and future will be identified and critiqued. Third, some of the practical implications of the limitations of the dominant ways of making sense of our prospects will be explored. Fourth, conclusions will be drawn regarding the full range of possible geopolitical futures that we may well face.

It will be argued, contrary to well-entrenched understandings, that it is not the case that while we face a host of what we see to be Grand Challenges, as we work them through, our modern/Industrial world will be increasingly successful, global, and sustainable. Rather, it will be suggested that as a form of civilization, we in the modern/Industrial world are in way more trouble than we now know. As we dig beneath the surface, we will confront the realization that, in principle, human societies and cultures are unsustainable to the extent that they are, or come to be, exemplars of a modern/Industrial form of civilization.

We will end with the thought that this realization may well, but need not, be tragic; that the possibility is real that we are in a comedy; and that we have not yet grasped our situation deeply enough to embody this hope wisely and compassionately. To learn to do so, of course, would mean that a plurality of those in power must come to accept a fundamentally new view of our deep work in the 21st Century—the new work of

becoming the first form of civilization in history, to consciously alter its character and trajectory through history. If these conclusions are at all sound, is hope warranted? Thursday evening we will explore this question and what an adequate response to these times may well require of us.

BIOSKETCH

Ruben Nelson is executive director of Foresight Canada. By inclination and training he is a big-picture, future-oriented, systemic strategic perceiver, thinker, and actor. He is a Canadian pioneer of serious futures research. As a free-lance intellectual and activist Ruben has invested his life in learning to see, think through, and act on the future-implications of the trends and forces that are driving strategic (trajectory-shaping) change, both within and among us. His formal training is in philosophy, political theory, and theology, with excursions into humanistic psychology, social policy and organizational theory. He is a graduate of both Queen's University and Queen's Theological College (Kingston, Canada). He has also studied at United Theological College in Bangalore, India. Over the years, Ruben has taught philosophy and advanced social theory, designed and managed a unique model for a university centre, been a social policy advisor to both federal and provincial governments in Canada, assisted in the articulation of Canada's policy on multiculturalism, designed a new social program for seniors in Canada, helped to conceive and formulate the work and operations of a research program for the National Advisory Council on Voluntary Action and the Premier's Council for Economic Strategy (Alberta), and led inquiries into Calgary as an Information Port and the form of scientific research that will be required to deal with the truly strategic, complex, and swampy issues of the early decades of this century. Ruben has also designed several programs of citizen engagement for all levels of governments. Ruben conceived, designed, and managed the Post-Industrial Futures Project—Canada's most extensive inquiry into the need for and emergence of a new form of civilization. Ruben has written on person-centered economics, the prospects of democracy (for the Finnish Parliament), and the next generation of strategic foresight. Ruben has served on the boards of many voluntary organizations, from local to global. He is a fellow of the World Academy of Art and Science, the World Business Academy, and the Meridian Institute for Leadership, Governance, Change and the Future. He has been honoured for his contributions to futures work in Canada by the Calgary chapter of the Queen's University alumni. He now lives with his wife, Heather, a NICU nurse, and their three cats in the Rocky Mountains of Alberta. They have two grown children.

TUESDAY EVENING

THE GREAT BALANCING ACT: HOW TO
FEED NINE BILLION PEOPLE WHILE
SUSTAINING ECOSYSTEMS IN A CHANGING
CLIMATE

Janet Ranganathan

ABSTRACT

Global human population is projected to increase from 7 billion today to more than 9 billion by 2050 (UN 2011). To sufficiently feed a population of 9 billion, worldwide food availability will need to increase by at least 70 percent (FAO 2009). Meanwhile, much of the planet's natural capital is being degraded through the extensification and intensification of food production. Food production is the largest cause globally of deforestation, accounts for 70% of global freshwater use, and contributes up to 27 percent of global greenhouse gas emissions per year. These impacts, in turn, can undercut future food production. Climate change, for example, will have profound implications due to changing precipitation patterns and other factors that are critical to agriculture (IPCC 2007). Likewise, food production depends on the availability of freshwater and numerous ecosystem services such as soil formation, erosion control, pollination, and more (Millennium Ecosystem Assessment 2005).

This presentation will begin with an overview of global metatrends shaping our world in the coming decades. It will discuss how a convergence of trends poses one of the paramount challenges of the century: how can the world adequately feed more than 9 billion people by 2050 in a manner that reduces pressure on climate, ecosystems, and freshwater while helping to alleviate poverty? It will then discuss strategies for responding to this challenge, including reducing food waste, addressing yield gaps, restoring degraded lands, shifting diets, and reducing competition for food crops from alternative uses. The presentation will draw on real-world examples of how particular obstacles are being overcome and solutions are being successfully implemented around the globe.

BIOSKETCH

Janet Ranganathan is the vice president for Science and Research at the World Resources Institute. She plays a lead role in ensuring that WRI's research is robust, evidence based, and designed to create scalable results. She works closely with the managing director to oversee the development of strategy across WRI's four programs: Climate, Energy and Transport; Institutions and Governance; People and Ecosystems; and Markets and Enterprises. Before becoming vice president, Janet founded and directed WRI's People and Ecosystems Program to reverse ecosystem degradation and ensure

ecosystems' capacity to meet human needs. Within this program she launched two major initiatives on Ecosystem Services and Forest Landscapes. Janet has also served in WRI's Market and Enterprise and Climate and Energy programs. She founded and directed the Greenhouse Gas Protocol Initiative, an international multistakeholder partnership convened by WRI and the World Business Council for Sustainable Development. The Greenhouse Gas Protocol is now the global standard for measuring and reporting business greenhouse gas emissions. Janet serves on the board of Ceres, the International Integrated Reporting Council and the Mars Science Advisory Committee. She is also a member of the International Programme Advisory Committee for the Ecosystem Services for Poverty Alleviation Programme supported by the UK Department for International Development (DFID). Janet has written extensively on a broad range of sustainable development challenges. Prior to joining WRI, Janet worked on business and environmental issues in the U.K. both as a senior lecturer at the University of Hertfordshire and with the UK Department of Environment and Hertfordshire Waste Regulatory Authority. Janet received a BSc. (Hons) from Imperial College of Science, Technology & Medicine, London in 1983, and a MSc. with distinction in environmental technology from Imperial College in 1990.

WEDNESDAY MORNING

ENERGY: SOME PERSPECTIVES FROM
PHYSICS

V. V. Raman

ABSTRACT

The world is familiar with the phrase *energy crisis*: one of the subsets of the theme of this conference. But what exactly is energy? What do physicists mean by that term? In what sense does one can speak of the energy crisis? What are the possibilities of coping with this crisis, and what hopes are there for such possibilities? These are some of the questions that will be explored in this lecture.

BIOSKETCH

Dr. V. V. Raman is emeritus professor of physics and humanities at the Rochester Institute of Technology. He is author of several books and articles on the historical and philosophical aspects of science and on science-religion issues. He is also the current president of IRAS.

RELIGION, GREEN RELIGION, AND DARK
GREEN RELIGION: ON THE POSSIBILITY
THAT “REVERENCE FOR LIFE” ETHICS
MIGHT HELP SECURE A FLOURISHING
FUTURE

Bron Taylor

ABSTRACT

Chastened by diverse figures, including Jean Jacques Rousseau, H. D. Thoreau, John Muir, Aldo Leopold, and many others, for promoting forms of spirituality that hinder reverent care for this world, some within the world’s predominant religions have sought to turn their traditions in more environmentally friendly directions. Social scientific research, however, indicates that the development of such green religion has only been modestly successful, at least to date. On the other hand, I contend, there is a nascent but increasingly influential form of religion or, at least, there are significant, religion-resembling cultural innovations that consider nature sacred and intrinsically valuable. Coherent with scientific understandings of cosmological and biological evolution, such spirituality involves affective experiences of belonging and connection to nature and feelings of kinship toward nonhuman organisms. Taking place largely outside of the world’s predominant religious institutions, such spirituality nevertheless has powerful institutional as well as individual proponents. Those who have been promoting or who have affinity with it, generally lead lives devoted to, or characterized by significant concern for, the conservation of biological diversity and the amelioration of human suffering. In a recent book, I labeled such spirituality and ethics “dark green religion,” and argued that if there is to be a flourishing future for human and other living beings, then something just like this would be needed to provide the affective ground for the needed social, economic, and political changes. In this presentation I will provide a global tour of examples of such spirituality to argue that just such an ecologically and socially adaptive spirituality is evolving. While such nature spirituality faces long odds, as any forthright examination of current trends makes clear, it provides a fighting chance for survival of the beautiful and precious planet that, at our best, we love and respect.

BIOSKETCH

See Monday morning.

THE STEADY-STATE ECONOMY FOR SAVING
THE FUTURE

Brian Czech

ABSTRACT

When we consider the threats to posterity, none are less forgiving than environmental deterioration. Saving the future means, first and foremost, protecting our air, water, soil, plants, and animals. However, this doesn’t mean that our approach should be environmental research, education, or even policy. At least in secular affairs, nothing is more environmentally affective and effective than economic policy, in particular macroeconomic policy. That’s because the threats to clean air and water, healthy soils, and biodiversity are a who’s who of the human economy: agriculture, mining, logging, livestock production, commercial fishing, roads, reservoirs, power lines and other economic infrastructure, manufacturing sectors from the heaviest to the lightest, and service sectors from the most general to the most specialized. Furthermore, production in every one of these sectors results in undesirable byproducts—pollution—due to the second law of thermodynamics (i.e., no production process can be perfectly efficient; waste heat and materials are a certainty). So we see that the human economy grows at the expense of the environment and its nonhuman species.

Economic growth has become like a religious icon in the media and in politics, but when we sweep aside the magical aura, economic growth is simply the process of increasing production and consumption of goods and services in the aggregate. That means it entails growing human population, per capita consumption, or both. It is indicated by increasing gross domestic product, or GDP, and nothing is a better indicator of environmental impact and biodiversity loss than GDP. Yet the overriding policy goal in domestic and international affairs is economic growth. This is partly because many people don’t seem to care about the environment or the future, but perhaps (and hopefully) more so because most people have never studied the conflict between economic growth and environmental protection. Fewer people yet have made the connections from environmental protection to economic sustainability to national security to international stability. Furthermore, neoclassical economists, corporations, naïve commentators, and unscrupulous politicians have led the public to believe that “there is no conflict between growing the economy and protecting the environment” and that a technological fix will save the day, as if the laws of thermodynamics can be broken, allowing us to have our cake and eat it too. Despite these enormous challenges, awareness of the conflict between economic

growth and environmental protection (and economic sustainability, national security, and international stability) is growing, and people are wondering, “What alternatives do we have?” The basic alternatives to economic growth are economic recession and the steady-state economy. Neither growth nor recession are sustainable, so saving the future entails a steady-state economy, or stabilized (mildly fluctuating) population and per capita consumption, as indicated by stabilized GDP, all else equal. The steady-state economy does not require a particular model of political economy (capitalist democracy, communist dictatorship, etc.) but it does require adjustments in family and consumer behavior, and of course numerous public policies would be conducive to steady-state economics, just as numerous public policies are now conducive to growth. The steady-state economy may also be pursued in international affairs; such diplomacy amounts to “steady statesmanship.”

BIOSKETCH

Brian Czech is president of the Center for the Advancement of the Steady State Economy (www.steadystate.org), a nonprofit organization dedicated to advancing the steady-state economy as a policy goal with widespread public support. He is also a visiting professor of natural resource economics at Virginia Tech and a wildlife biologist in the national office of the U.S. Fish and Wildlife Service. Czech is the author of two books: *Shoveling Fuel for a Runaway Train* and (with Paul R. Krausman) *The Endangered Species Act: History, Conservation Biology, and Public Policy*. A third book, *Supply Shock: Economic Growth at the Crossroads*, will be out in 2013. His 50-some research and policy articles have appeared in more than 20 scientific and professional journals, indicating the interdisciplinary nature of his scholarship. Czech has played a leading role in getting professional societies and environmental NGOs engaged in ecological economics and macroeconomic policy issues. He is a regular contributor to the *Daly News*, a blog devoted to advancing the steady-state economy as a policy goal with widespread public support. Czech has a B.S. from the University of Wisconsin, an M.S. from the University of Washington, and a Ph.D. from the University of Arizona.

THURSDAY EVENING

IS HOPE WARRANTED? COOPERATING
WITH OUR OWN EVOLUTION BY
COCREATING THE NEXT FORM OF
CIVILIZATION

RubenNelson

ABSTRACT

As argued Tuesday morning, the bad news is that our modern/Industrial form of civilization has no future *as a modern/Industrial form of civilization*. The good news is that all forms of civilization appear to be capable of generating at least one new form of civilization that transcends the form from which it has emerged. Think, for example, of the emergence of the settled agricultural form of civilization emerging from the tribal form. This implies, at least in principle, that there are no reasons, *a priori*, why a given set of modern/Industrial cultures cannot evolve into their own versions of the next form of human civilization. Close examination may even reveal that this process is underway. To the extent that this dynamic gains strength, we should expect that countervailing forces will emerge. One answer to the title question, then, is this: *As a species, our hope is in these three human developments: (1) the confirmation that our modern/Industrial form of civilization has no future; (2) the discovery and exploration of the dynamics by which the next form of civilization is already emerging within and among us; and (3) our conscious commitment to learn the future faster by cooperating with our own evolution.* Lest this sound too easy, the hurdles on this path will be identified. For example, little of the *sustainability work* now being undertaken challenges, let alone escapes, our modern/Industrial frames of reference. Further, no culture has a robust and well-developed capacity—personal and institutional—to undertake this work. None has any serious idea of how, consciously, to nurture its cooperation with its own evolution. Worse, not one has this aspiration on its agenda. In sum, in the past all transitions that mark the emergence of a new form of civilization have been slow, local/regional, unconscious and optional. For us the criteria for success are quite different. We must learn rapidly, globally, consciously and reflexively, knowing that we have no choice save death. Daunting though they are, these challenges dim, but do not wholly preclude, the possibility of success of this journey of faith. Additional signs of hope will be identified, as will steps towards a possible pathway into a truly postmodern/Industrial future.

BIOSKETCH

See Tuesday morning

FRIDAY MORNING

CLOSING DISCUSSION

CHAPEL, CHOIR, CANDLELIGHT, CONCERT

Activities of the day begin right after breakfast each morning with chapel. Candlelight Services formally end the day, after the evening lecture.

CHAPEL SERVICES: THE QUESTIONS THAT EMPTY THE ROOM (SANCTUARY) (LAB)

8:30–9:15 A.M.

Our Chapel speaker for the week is the Reverend Doctor Richard S. Gilbert. He retired in June 2005 after serving 44 years in the Unitarian Universalist ministry in Cleveland, Ohio; Golden, Colorado; Ithaca, NY; and for 32 years at the First Unitarian Church of Rochester, NY. He received an M.Div. from St. Lawrence University Theological School, a D. Min. from Colgate Rochester Divinity School, and honorary doctorates from St. Lawrence University, Meadville Lombard Theological School, and Starr King School for the Ministry. In 1995 he received the Holmes-Weatherly Award of the Unitarian Universalist Association for faith-based social justice work. He is the author of the Building Your Own Theology adult religious education series, as well as three Skinner House Books: *The Prophetic Imperative: Social Gospel in Theory and Practice*, and *In the Holy Quiet of This Hour*, a book of meditations. Currently he is president of Interfaith Impact of New York State, part-time Social Justice coordinator for the St. Lawrence Unitarian Universalist District, and recently he was elected president of the Unitarian Universalist Retired Ministers and Partners Association. He does guest preaching, social justice workshops, and is working on several books, including the religious life of Susan B. Anthony and the philosophy of UU religious education. He also has taught at Colgate Rochester Crozer Divinity School, Starr King School for the Ministry, and Meadville Lombard Theological School. In 2011 he celebrated his 50th year in the Unitarian Universalist ministry.

The theme of the 2012 IRAS Conference is “Saving the Future.” Concurrent chapel talks will be less declarations than questions we need to ask “going forward”—the questions that empty the room. These are not casual, cocktail hour questions; rather those raised in the deeper realms of the spirit—for scientists, for religionists, for all people. Here are titles and abstracts of the six chapel talks.

Sunday – *What Happened on the Eighth Day? Darwin’s Intelligent Design.* No issue in the famous religion/science debate has caused more problems than evolution. So what did happen on the eighth day that Darwin so carefully catalogued and interpreted? Darwin’s personal struggle with faith and family are little understood and provide insights into the relationship of science and religion. Our reading is from *Inherit the Wind* by Jerome Lawrence and Robert Edwin Lee.

Monday – *Are We Stripping the Earth of Its Mystery?* As science probes more deeply into reality, are we stripping the natural world of its mystery and beauty? Does science try to go too far in explaining things so that we are left with no thrill of discovery and mystery? We’ll look at some of the “aha” moments of scientists. Walt Whitman’s poetry is our entry point.

Tuesday – *Have We Reached “The End of Science”?* as John Horgan suggests in his book *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age?* That is, have we reached the limits of the models we use and are just filling in the details? Our text is Phyllis McGinley’s poem, “The Draft of an Open Mind.”

Wednesday – *Does God Play Dice? Was “It” an Accident?* Why is there something and not nothing? As much as I am a “believer” in science, I continue to ask the fundamental questions of cosmic origins—and our own. Einstein suggested “God” doesn’t play dice, but what about chaos and cosmic caprice? We’ll have a little help from Galileo and Cremonini in *The Star Gazer* by Hungarian novelist Zsolt de Harsanyi.

Thursday – *Does the Earth Have Moral Rights?* There is a general consensus that human beings have moral rights, but what about the earth? Is there a limit to what we ought to do to satisfy human “needs,” a limit defined by the earth itself? How can the dialogue between science and religion help us answer this critical question? Our reading is from Bill McKibbin’s book *Eearth*.

Friday – *Is the Whole Greater than the Sum of Its Parts?* Consider the scientific analysis of the orchestra in terms of sight and sound. Does this convey what an orchestra is? When we analyze life, is it more than its chemistry and biology and sociology? Gaia? God? The day’s reading is James Weldon Johnson’s “The Creation.”

THE IRAS CHOIR

Joyce Gilbert, the 2012 choral person at IRAS, has chosen a wide range of 2-, 3-, and 4-part music to share with singers and attendees during chapel services, possibly an evening service or two, and, of course, at the Talent Show. All singers are most welcome.

One of many advantages in attending the University of Rochester is studying organ and voice while being an English major—and Joyce did and was. Her masters degrees are from Northwestern (radio/TV/film) and the University at Buffalo (library science). Choral singing is a life-long passion which has found outlets with the Cleveland Orchestra Chorus (under Robert Shaw, at the

Festival Casals, and at the 20th Anniversary of the United Nations in New York City), the Chicago Symphony Chorus (under Margaret Hillis), and currently with the Eastman-Rochester Chorus under William Weinert of the Eastman School of Music.

And then there's Gilbert (no relation) and Sullivan. A few years back Joyce created terse versions of *HMS Pinafore* and *Pirates of Penzance* for use with an intergenerational church group. One or two G&S melodies just might be heard this year at Silver Bay.

Come sing a song with me!

IRAS CANDLELIGHT SERVICES

The traditional IRAS candlelight services, which originated at our long-time conference home at Star Island, will be brought to Silver Bay. These short contemplations will be held each evening, from Saturday through Thursday, following the evening lectures. Leading services this year will be Tanya Avakian; Muriel Blaisdell, Cynthia and Peter Kelley; Ursula Goodenough; Chip Ordman; Edmund Robinson; and Alison Wohler. This year's candlelight organizer is Dan Solomon.

CONCERT

Friday, 3:10–4:00

We are delighted that Jacqueline Schwab has agreed to be this year's Sturgis Music Fellow. She will accompany the choir and give a solo performance on Friday at 3:10 that will feature her arrangements of vintage American music and traditional Celtic music—Stephen Foster and Civil War song tunes, Victorian ballroom dance tunes, Scots and Irish songs and fiddle tunes brought over by settlers, hymns and spirituals, ragtime, plus possibly

20th-century Latin waltzes and tango, Billie Holiday blues, and contemporary Celtic traditional music.

In Ken Burns' words, "Jacqueline Schwab brings more feeling and intensity to music than anyone I know. Her playing is insistent, physical, heartfelt and ... unusually moving." Playing with "the jazz/classical improvisational spirit of Keith Jarrett and the touch of George Winston" (*New England Folk Almanac*), pianist Jacqueline Schwab has been heard on over a dozen of Burns' documentaries, including his Grammy award-winning *Civil War*, his Emmy award-winning *Baseball, Lewis and Clark, Mark Twain, The War*, and *The National Parks: America's Best Idea*, and she will be heard on his upcoming *Dust Bowl*. She has also been heard on PBS documentaries *The Irish in America*, Ric Burns' *New York: A Documentary Film*, and others. She has performed at the White House for President Clinton (celebrating Burns' *Lewis and Clark* series) and also, with singer Jean Redpath, on Minnesota Public Radio's *A Prairie Home Companion* and CBS' *Late Show with David Letterman*. Her playing will be heard nationally on Thanksgiving Day, 2012, on Minnesota Public Radio host John Birge's *Giving Thanks* program. Jacqueline has three solo recordings: *Mad Robin*, *Down Came an Angel* and *Mark Twain's America* and the duo *Celtic Dialogue* recording, with Scottish fiddler Laura Risk, plus a solo CD of waltzes and airs in production. She is a graduate of New England Conservatory of Music, where she majored in piano improvisation. She is married to Rev. Edmund Robinson, the minister of the UU Meeting House in Chatham, MA and a member of the IRAS Council. They live on Cape Cod.

For more information, see Jacquelineschwab.com, or listen to sound clips on myspace.com/jacquelineschwab.

IRAS SEMINAR

In the IRAS Seminar we explore a recent book or manuscript written by a member of IRAS, followed by open discussion by all who would like to participate. This summer, our author will be J. L. Robertson of Cincinnati, Ohio, who will be discussing his forthcoming book, *Substance, Spirit and Religious Naturalism*. The seminar will be held in the Watson Arts Center at 1:00–1:50 on Tuesday and Wednesday, and at 1:00–2:50 on Thursday. It is chaired by Robertson himself and will feature responses and discussion by several persons who have reviewed a chapter or two.

DESCRIPTION

Substance, Spirit and Religious Naturalism, a manuscript, is an overview of the paradigm of Religious Naturalism (RN). In Part 1 of the book Robertson looks at the attributes of paradigms as being a framework that encompasses a mentally constructed domain of some sort usually of a philosophical, theoretical or scientific nature. In this case it is a religious philosophy.

The title of the book is explained in the opening of the first chapter: "RN, A True Story." "In Catholic communion, bread is nibbled and wine sipped. These symbolize the body and blood of Christ. If there were a Religious Naturalism counter part it would be bread symbolizing the stout, physical, objective world of substance (mass, energy,???) and the liquid symbolizing the fluid, mental, subjective world of emotions and spirit."

In chapter 2 he goes on to give reasons for the need for a new religious outlook—the conflicts still going on in the world, possible brewing religious wars, and bottom line: the old traditional religions have not got the job done. He then tells the history of RN over the last 150 years relying heavily on the work of Jeremy Stone. This is concluded with about a page and a half each of opinions of 15 current RNs. Most of these were solicited inputs and not quotes from their published works.

This history is followed by what Robertson sees as aspects of current RN thinking in chapters on RN Cornerstones, 100 attributes of RN, Philosophy of RN, Goals of RN, Spiritual Naturalism and God Language. Much of this has been presented publicly in his websites and the poster at last year's conference.

Part 2 continues with several things which he believes RN needs to address. There is a somewhat critical look at RN co-authored with Ash Bowie. Morality is touched on in RN Words of Wisdom followed by Emotions and

Virtues, Emergence, Sex the RN Way, RN and Women, Karma, Happiness and a Summation.

Mr. Robertson started this work about 8 years ago. It was originally about what he was calling neo-Pantheism. His attendance at IRAS conferences resulting in his adopting RN as its theme. The last hour of this seminar will focus on how RN may provide answers to the culture/religion aspects of over population, resources depletion and warming.

BIOSKETCHES

Jerald Robertson has a uniquely broad background in the food, plastic laminates, electronics, printing and government contract research industries at such companies as General Electric, Formica, Monsanto, Cincinnati Milacron, and Ralston Purina. He is a 1960 graduate of Wilmington College with a major in physics. Graduate study was done at Amherst College and the University of Dayton. His full resume can be found at <http://jeraldrobertson.info>. He is currently finishing up a book on the basics of Religious Naturalism (<http://www.religiousnaturalist.org>). He is an active environmentalist, avid grower of hostas, and serves on his town's Village Council.

Michael Cavanaugh is a retired lawyer who has served in several capacities in IRAS. He has written one book in the science/religion arena and several *Zygon* articles. He is married to Carolyn, a retired teacher and accomplished volunteer activist.

Rev. Edmund Robinson is a Unitarian Universalist parish minister serving a congregation on Cape Cod. He has been involved with IRAS since the late 1990s and was Minister of the Week in 2008. Prior to being a minister, he was a trial lawyer for 20 years. He loves to make music and is married to the pianist Jacqueline Schwab, this year's Sturgis Fellow.

Gene Troxell is a retired philosophy professor, who has regarded himself as a pantheist for at least thirty years.

IRAS WORKSHOPS

Workshops are listed alphabetically by presenter.

ON WORLD RELIGIONS: DIVERSITY, NOT DISSENTION*

Sunday, 2:00–2:50

Anita N Balslev

ABSTRACT

At a time when the aspiration to share a common technology is manifested in bridging the distances pertaining to travel and communications, renewed effort is needed to promote cross cultural conversation in order to remove cultural distances. Among various concerns, especially urgent is an open conversation focusing on how the presence of multiple religious traditions actually influence our sense of identity and that of difference. This endeavor for creating bridges of understanding among the religions of the world—by noting their overlaps as well as by acknowledging their differences—is of crucial importance for the contemporary interdependent world. The challenges confronting such a project are stupendous, given the strong impact of the world religions in the contexts of peace and violence, protest and transformation at various levels of human transactions. This is also why the theme of religious diversity needs to be studied not only in terms of metaphysics and ontology, rituals and mythology, but also in its sociopolitical dimensions. This talk will mainly seek to outline the gamut of concerns that call for scholarly attention in a global context. It is hoped that an increased awareness of various issues will stimulate collective thinking and that eventually all these will be taken up for a close examination by the participants of various traditions in collaboration.

BIOSKETCH

Anindita N. Balslev is a philosopher and the initiator of the forum for Cross Cultural Conversation. With a masters degree from Calcutta University and Ph.D from University of Paris, her research and teaching experience span over India, France, USA, and Denmark. She serves on the board of important international organizations and is a founding member of the International Society for Science and Religion. Selected publications: *A Study of Time in Indian Philosophy*, 3rd ed., New Delhi, 2008; *The Enigma of I-consciousness* (in press: OUP), 2012; co-author of *Cultural Otherness*, correspondence with Richard Rorty, 2nd ed. OUP, USA, 1999; Italian trans. *Noi E Loro il Saggiatore*, 2001; editor, *Cross Cultural Conversation*, OUP, USA 1999; *Toward Greater Human Solidarity*, Kolkata, 2006; *On India: Self-Image and Counter-Image*, (in press: Sage), 2012; co-editor, *Religion and Time*, Brill, The Netherlands, 1993; *Compassion in the Religions of the World*, Germany, 2010. She has published many papers in reputed journals.

POLYDOXY AND MULTIPERSPECTIVALISM IN RELIGION AND SCIENCE*

Tuesday, 2:00–2:50

Whitney Bauman

ABSTRACT

Postcolonial and Postmodern understandings of knowledge and truth have challenged the very basis of universal truths in religions and objectivity in modern sciences. Feminist philosopher of science Sandra Harding, for instance, calls for “strong objectivity” in the sciences that takes account of the subjectivity of the observer. In religious studies, feminist, race-based, gender-based, and sexual-based critical theories have challenged the idea of a “single” history or “single” tradition. In its place, these critical theories highlight the multiple perspectives that make up any given religious tradition. This workshop will draw from the histories of these “post” traditions in order to begin to articulate a multiperspectival, polydox, and planetary understanding of the science and religion dialogue. Multiperspectivalism suggests that no one human being, culture, or even species contains a single truth about reality. Instead, the world is coconstructed by multiple perspectives and ways of becoming in the world. Each of these ways of becoming serves as a “truth regime” rather than a definitive explanation. Polydoxy suggests that meaning-making practices (found in and outside of “traditional” religions) have always been and will always be polydox. In other words, there is no single interpretation in any given time or place (as is suggested by the “radical orthodoxy” movement), but rather any given interpretation is justified through persuasion and power relations. Discussions of meaning-making practices then are discussions about the ethics of how our belief systems shape the worlds around us. Finally, planetarity connotes our common context with other human beings and the rest of the natural world. Whatever else we are, we and our cultures, technologies, religions, sciences, etc. are of this planet. As such, there are many possibilities for living into the planetary future. Dialogues around religion and science, then, ought to be geared toward what types of planetary futures we might want to cocreate rather than around metaphysical or ontological issues as such.

HEALTHY, ETHICAL, AND SUSTAINABLE COOKING

Tuesday, 2:00–2:50

Ruth Bercaw, Nancy Weiss-Fried, and Marilu Raman

ABSTRACT

This will be an interactive workshop on cooking with emphasis on healthy, sustainable, and ethical practices. Specific topics will vary based on participant interest, but possibilities include: sustainability issues relating to agricultural production and food choice; how organic is organic(?); and issues relating to local vs. long distance; economic impact, seasonal concerns, transportation and cooking international foods using exclusively local ingredients (how to/should we). Format will be informal discussion moderated by facilitators Ruth, Nancy, and Marilu and will include a recipe exchange of both meat and vegetarian dishes.

Prospective workshop participants are asked to bring 20 photocopies of a half-dozen of their favorite (and applicable) recipes. Ruth, Nancy, and Marilu will take it from there.

CAN TECHNOLOGIES SAVE US IN TIME? BALANCING LIBERTY AND LAW

Sunday, 2:00–2:50

Paul H Carr

ABSTRACT

Our population explosion and fossil-fuel burning are unsustainable. Medical advances and the green revolution enabled the exponential growth of our population to over 7 billion. Can birth control technology save us in time? The opposition of conservative religion to birth control is not helping. Nevertheless, Brazil has recently started to decrease its population with small families, modeled on TV, and the availability of birth control.

The burning of fossil fuels has enhanced our standard of living with the unintended consequence of carbon emissions that cause global warming, with its weather extremes and rising sea levels. Fossil-fuel lobbyists and skeptics deny these findings of the UN IPCC (International Panel on Climate Change). Will their denial prevent new technology for noncarbon emitting energy sources to be deployed in time? Will their faith in Adam Smith's invisible hand of *laissez faire* economics save us from our unsustainability? Should this libertarian extreme be balanced by laws and regulations to prevent the *tragedy of the commons*?

BIOSKETCH

See lecture listing for Monday evening.

INCOMPLETE NATURE: HOW MIND EMERGED FROM MATTER

Sunday, 1:00–1:50

Tuesday, 1:00–3:50

Terrance Deacon

ABSTRACT

As physicists work toward completing a theory of the Universe and biologists unravel the molecular complexity of life, a glaring incompleteness in this scientific vision becomes apparent. The "Theory of Everything" that appears to be emerging includes everything but us: that is the feelings, meanings, consciousness, and purposes that make us (and many of our animal cousins) what we are. These most immediate and incontrovertible phenomena are left unexplained by the natural sciences because they lack the physical properties—such as mass, momentum, charge, and location—that are assumed to be necessary for something to have physical consequences in the world. This is an unacceptable omission. We need a "theory of everything" which does not leave it absurd that we exist.

My new book *Incomplete Nature* begins by accepting what other theories try to deny: that, although mental contents do indeed lack these material-energetic properties, they are still entirely products of physical processes and have an unprecedented kind of causal power that is unlike anything that physics and chemistry alone have so far explained. It turns out that it is—paradoxically—the intrinsic incompleteness of these semiotic and teleological phenomena that is the source of their unique form of physical influence in the world. *Incomplete Nature* meticulously traces the emergence of this special causal capacity from simple thermodynamics to self-organizing dynamics to living and mental dynamics, and demonstrates how specific absences (or constraints) play the critical causal role in the organization of physical processes that generate these properties.

BIOSKETCH

Professor Deacon is currently chair of the Department of Anthropology at University of California Berkeley. He is also a member of the Helen Wills Neuroscience Institute at UC Berkeley. He has also held positions at Harvard University, Harvard Medical School, and Boston University. He has been a participant in numerous IRAS conferences since the early 1990s. His research has combined human evolutionary biology and neuroscience, with the aim of investigating the evolution of human cognition. His work extends from laboratory-based cellular-molecular neurobiology to the study of semiotic processes underlying animal and human communication, especially language. Many of these interests are explored in his 1997 book, *The Symbolic Species: The Coevolution of Language and the Brain*. His neurobiological research is focused on determining the nature of the human divergence from typical primate brain anatomy, the cellular-molecular mechanisms producing this difference,

and the correlations between these anatomical differences and special human cognitive abilities, particularly language. In pursuit of these questions he has used a variety of laboratory approaches including the tracing of axonal connections, quantitative analysis of regions of different species brains, and cross-species fetal neural transplantation. The goal is to identify elements of the developmental genetic mechanisms that distinguish human brains from other ape brains, to aid the study of the cognitive consequences of human brain evolution.

His theoretical interests include the study of evolution-like processes at many levels, including their role in embryonic development, neural signal processing, language change, and social processes, and how these different processes interact and depend on each other. Currently, his theoretical interests have focused on the problem of explaining emergent phenomena, such as characterize such apparently unprecedented transitions as the origin of life, the evolution of language, and the generation of conscious experience by brains. This is fueled by a career-long interest in the ideas of the late 19th-century American philosopher, Charles Sanders Peirce, and his theory of semiosis. His new book, *Incomplete Nature: How Mind Emerged from Matter*, explores the relationship between thermodynamic, self-organizing, evolutionary, and semiotic processes and provides a new technical conception of information that explains both its representational and normative properties.

DEFINING SUSTAINABILITY

Sunday, 3:00–3:50

Lindsey Evans-Mayhew

ABSTRACT

Sustainability is a hot topic, but what does it mean? The World Bank definition includes environmental integrity, social justice, and economic feasibility. Using a progressive learning approach we will brainstorm ways to communicate the full meaning of sustainability to a variety of audiences.

BIOSKETCH

Lindsey Evans-Mayhew is a doctoral candidate in psychology at Clark University in Worcester, Massachusetts. She is fresh from presenting a paper on a progressive learning approach to science education at the Jean Piaget Society meeting in Toronto in early June. She has a BS in Biology from Elizabethtown College in Elizabethtown, Pennsylvania. She was in the site visit group which recommended Silver Bay as our venue.

IMAGINATIVE SOLUTIONS FOR A SET OF CURRENT ASTROPHYSICAL PROBLEMS

Sunday, 2:00–2:50

Herb Fried

ABSTRACT

Dark Energy and Dark Matter are two well-known Astrophysics puzzles, that are still not understood, nor is there any familiar mechanism for the extraordinary Inflation, which rapidly grew our Universe from an unbelievably small speck at the instant of the Big Bang, to one many orders of magnitude larger, in an extremely short time. But there is, perhaps, a connection between these topics, which leads to an underlying explanation of the recently seen “Fermi bubbles” rising above and below our Galaxy. Such explanation is admittedly unusual, but violates no physical Laws; and a small part of it—which might be called a “Tachyon Condensate”—forms the basis of the current CERN search for the “Higgs boson.” Continuous, 10^3 GeV gamma radiation from dozens of astro-sources is the indication that a new underlying mechanism, not seen or capable of being measured in our terrestrial world, is responsible.

BIOSKETCH

Herb Fried is an emeritus professor and research professor of theoretical physics at Brown University, the author of three books on Functional Quantum Field Theory, and numerous refereed publications; the organizer of numerous international workshops; and currently working on his fourth (and last) book, which will incorporate some of the latest research performed by two of his French colleagues and himself. At this time he has a modest Templeton Foundation Grant to enable him to continue this research.

CONTRARIAN POSITIONS ON SAVING THE FUTURE

Sunday, 3:00–3:50

Stanley Klein and Jerald Roberston

ABSTRACT

There is general agreement amongst IRASians that for a healthy future, society needs to solve serious problems with:

- Resource depletion
- Climate change
- Population control

A major obstacle standing in the way of progress on these issues is the presence of contrarian opinions, many held by thoughtful individuals, with insufficient effort applied to resolving the differences. This workshop will examine the reasons for the difficulties in tackling these differences. IRAS may be a particularly good place for this discussion to take place since some of the issues have a parallel in the science-religion conflicts that have been a longstanding topic for IRAS.

BIOSKETCH

Mr. Robertson has a uniquely broad background in the food, plastic laminates, electronics, printing, and

government contract research industries at such companies as General Electric, Formica, Monsanto, Cincinnati Milacron, and Ralston Purina. He is a 1960 graduate of Wilmington College with a major in physics. Graduate study was done at Amherst College and the University of Dayton. His full resume can be found at <http://jeraldrobertson.info/index.html>. He is currently writing a book on the basics of Religious Naturalism (<http://www.religiousnaturalist.org/home.html>). He is an active environmentalist, avid grower of hostas, and serves as a councilman on his town's Village Council.

Stan Klein: see lecture listing for Tuesday evening.

SUPREME COURT DECISIONS DURING THE LAST YEAR

Sunday, 2:00–2:50

Ted Laurenson

ABSTRACT

We will discuss the Court's decisions during the last year, including (but not only) the health care decision.

BIOSKETCH

See lecture listing for Monday evening.

STEALING THE FIRE OF THE GODS AND HEALING THE WORLD

Tuesday, 3:00–3:50

WEDNESDAY, 2:00–3:50

Albert Levis, MD and Maxwell Eli Levis

ABSTRACT

Understanding psychology as the Moral Science.

A new perspective understands the creative process as a concise conflict resolution scientific phenomenon. This process redefines the unconscious as the measurable natural science moral order phenomenon that explains how psychology is the origin of morality.

Reconciling religions as forerunners of the Moral Science observing the sculptural trail in the history of love relations.

Religions become demystified as partial and complementary discoveries of the unconscious conflict resolution process. They are reconciled as alternative ways of resolving domestic conflicts gradually progressing to fairness between the genders and the generations and by identifying gods with increasingly abstract attributions of the unconscious process. Science completes the progression to fairness and abstraction on the nature of the divine.

"Creativity and Power Management," an emotional and moral education program.

This may heal the world with a shift of paradigms from the stories we believe as the truth to the plot of stories as

the universal scientific moral homeostatic physiological unconscious adaptive mechanism. "Creativity and Power Management" is an emotional and moral education program that delivers "insight in one hour, enlightenment in one day, and wisdom in one week" by combining the study of the exhibits of the Museum of the Creative Process as the cognitive segment with the completion of the Conflict Analysis Battery, as the experiential segment. This program fulfills the objectives of education: it bridges the humanities and the sciences, leads to self knowledge and clarity of moral values as the scientific principles of conflict resolution.

BIOSKETCH

Albert J. Levis, MD, psychiatrist, is founder and director of the Museum of the Creative Process in Manchester, VT. Albert Levis was born in 1937 to a Jewish family in Athens, Greece. After surviving the Holocaust in hiding, Levis studied at Athens College and the Universities of Zurich, Lausanne, and Yale. He founded The Center for the Study of Normative Behavior in Hamden, CT and the Wilburton Inn and Museum in Manchester, VT as a training center.

Levis is best known for his Formal Theory, an integrative approach to behavioral analysis and personality assessment. He has published *Conflict Analysis and The Formal Theory of Behavior* and *Conflict Analysis Training*, a program of emotional education.

Maxwell Eli Levis, MTS, Albert's youngest son, graduated from Columbia and Harvard Divinity School. Currently completing his PhD at Boston University. Maxwell's research deals with developing nuanced clinical psychological assessments that foster wellness and emotional growth.

Reference: Albert Levis, Maxwell Eli Levis. (2011) *Science Stealing the Fire of the Gods and Healing the World*. Normative Publications.

THEOLOGY AS AN OPEN SYSTEM: A VEDANTIC, JAIN, AND PROCESS-INSPIRED APPROACH TO THE DIVERSITY OF WORLDVIEWS*

Sunday, 3:00–3:50

Jeffery D Long

ABSTRACT

A conventional contrast often drawn between science and religion is that science is an open-ended and self-correcting system, willing to give up deeply held assumptions in favor of new models as warranted by new data, whereas religion involves a dogged adherence to an absolute worldview without regard for new information or insight. Departing from this simplistic (and empirically false) convention, this project posits a pluralistic theology that draws upon the Vedanta tradition of Hinduism, the philosophical doctrines of the Jain tradition, and the

process metaphysics of Alfred North Whitehead, to develop an open system for the interpretation of diverse worldviews in a way that draws attention to a deep harmony among these worldviews, but in a way that does not minimize or dismiss their genuine differences, nor impose a static harmony upon them from without, and that moreover allows for an ongoing incorporation of new insights and an ongoing process of self-correction through dialogue and in-depth engagement across religious and philosophical boundaries. The context of the development of this open system is the field of interreligious dialogue and comparative theology, though the ideal for this system is that it could apply to the dialogue between religion and science as well. Drawing upon earlier work by the same author, this project will represent the first application of this system to the question of religion and science.

BIOSKETCH

Jeffery D. Long is professor of religion and Asian studies at Elizabethtown College in Elizabethtown, Pennsylvania. He is the author of *A Vision for Hinduism: Beyond Hindu Nationalism* (I.B. Tauris, 2007), *Jainism: An Introduction* (I.B. Tauris, 2009), *The Historical Dictionary of Hinduism* (Scarecrow Press, 2011), and *Indian Philosophy: An Introduction* (I.B. Tauris, Forthcoming 2013). He is also chair emeritus of the Dharma Academy of North America (DANAM), and a contributor to a number of journals and edited volumes.

ANEW PARADIGM FOR THEOLOGICAL THINKING ABOUT EVOLUTION

Tuesday, 2:00–2:50

E Maynard Moore

ABSTRACT

The methodological boundary conditions established by scientific inquiry must be respected by warranted theological inquiry, but the underlying philosophical assumptions may not be appropriate. On the other hand, the arguments constructed by “intelligent design” advocates fall far short of meeting basic principles of scientific inquiry. My suggestion here is that the foundation for a new paradigm might be found in theories concerning autocatalysis and the consequent insights about nested hierarchies of reality. Within a framework of an ecology of cooperation, we might find a new starting point for an *evolutionary theology* appropriate for fruitful dialogue in the 21st century.

BIOSKETCH

I am ordained United Methodist clergy (retired) and have been a member of the Baltimore-Washington Conference of the United Methodist Church in the National Capital Area for 30 years. During 2001–2002 I coordinated a series of sixteen formal sessions at Metropolitan Memorial United Methodist Church in Washington, DC that involved prominent scientists, including seven Nobel

Laureates, among them Dr. Charles Townes, Dr. Julius Axelrod, and Dr. William Phillips. I have been a member of IRAS since 2007, and presented workshops in 2009. I am a member of the American Scientific Affiliation, I participate in regular DoSER programs of the American Association for the Advancement of Science, and frequent program presented and sponsored by MetaNexus.

For some years now I have been a participant in programs “to foster advances in the dialogue between the sciences and religion and theology within all world religions,” some of which have been sponsored by the Templeton Foundation. I served as major gifts coordinator for the Campaign for Forgiveness Research, sponsored in part by the John Templeton Foundation, and have been a participant in such symposia as

- “Cosmos and Creation,” at Loyola University, Baltimore, MD
- Religion & the Natural World, Symposium at National Cathedral
- “Empathy, Altruism and Agape,” Harvard University
- “Forgiveness and Reconciliation” with Archbishop Desmond Tutu in Boston
- Symposium celebrating John Archibald Wheeler at Princeton
- Celebration for Freeman Dyson at the National Cathedral
- “Evolution: New Pathways,” Metanexus, Haverford College

Currently I serve on the Board of Directors for the InterFaith Conference of Greater Washington DC, one of the nation’s oldest such organizations, now embracing eleven different faith traditions in the nation’s capital. In addition, I maintain active memberships in the Center for Process Theology at Claremont Graduate Seminary in California, and the Churches’ Center for Theology and Public Policy in Washington DC. I have completed work for two graduate degrees from S.M.U., an M. A. from the University of Chicago Divinity School, and the Ph.D. in Higher Education/ Adult Education at the Union Graduate Institute & University in Cincinnati, Ohio.

INTERSUBJECTIVITY: DESIRING TO CARE FOR CREATION

Wednesday, 3:00–3:50

Sally K Severino

ABSTRACT

Human intersubjectivity conveys compassion (that cares for creation) and violence (that destroys creation). Suggestions for correcting violence and bringing relationships into compassionate communion open the presentation for discussion, which may lead to larger debates regarding issues of saving the future of creation.

BIOSKETCH

Sally K. Severino received her M.D. from Columbia College of Physicians and Surgeons. She served seventeen years in academic psychiatry at New York Hospital–Cornell Medical Center before becoming professor and executive vice-chair, Department of Psychiatry, University of New Mexico Health Sciences Center, where she is currently professor emeritus of psychiatry. Certified by the American Psychoanalytic Association, she served as the first woman president of the American College of Psychoanalysts.

THE EMOTIONAL PSYCHOLOGY OF WORLDVIEWS*

Tuesday, 3:00–3:50 P.M.

John A Teske

ABSTRACT

We recognize that diverse groups of human beings have worldview differences between which there are irresolvable disagreements. We nevertheless share life on this planet and are increasingly and inescapably interdependent with each other. We believe that our ability to recognize, to honestly address our differences, and to share our existential dilemmas, may be crucial to the future of the planet and to the possibility of human flourishing. We believe that it is therefore necessary to acknowledge that such is unlikely to occur through the assertion of hegemony by any particular worldview, including the secular scientific worldview.

We all share a common hope for rational, civil discourse across worldviews, and a belief that such a discourse is crucial in a world in which we are undeniably interdependent upon each other, in a variety of ways which include both the economic and ecological. It is important that we not shy away from difficult or even contentious differences, and any strategies of persuasion must take such interdependencies into account. The hope is for navigating worldviews in ways that are minimally invasive, but that might nevertheless help improve the degree to which human discourse might be more productive of harmony and cooperation, especially in areas crucial to our survival as a species.

BIOSKETCH

John A. Teske is professor of psychology at Elizabethtown College in Elizabethtown, Pennsylvania. Relevant publications: “Externalism, Relational Selves, and Redemptive Relationships” (2011) and “Neuromythology” (2006), in *Zygon: Journal of Religion and Science*. “The Cognitive Paradoxes of Love and Faith,” (2012), and “Bindings of Will” (2007), in *Studies in Science and Theology*. He was IRAS President 2005–2008, and he was co-organizer, with Ted Laurenson, of “The Mythic Reality of the Autonomous Individual,” at The Chautauqua Institution in New York, in 2009.

*Preamble for Balslev, Bauman, Long, and Teske talks:

NAVIGATING WORLDVIEWS

We recognize that diverse groups of human beings have worldview differences between which there are irresolvable disagreements. We nevertheless share life on this planet and are increasingly and inescapably interdependent with each other. We believe that our ability to recognize, to honestly address our differences, and to share our existential dilemma, may be crucial to the future of the planet and to the possibility of human flourishing. We believe that it is therefore necessary to acknowledge that such is unlikely to occur through the assertion of hegemony by any particular worldview, including the secular scientific worldview. The hope is for navigating worldviews in ways that are minimally invasive, but that might nevertheless help improve the degree to which human discourse might be more productive of harmony and cooperation, especially in areas crucial to our survival.

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READING LIST

Robert Bercaw

- Clark, Gregory. 2007. *A Farewell to Alms*. Princeton University Press.
- Cullen, Heidi. 2010. *The Weather of the Future*. Harper.
- Diamond, Jared. 2011. *Collapse, How Societies Choose to Fail or Succeed*. Viking.
- Hacker, Jacob and Paul Pierson. 2011. *Winner-Take-All Politics*. Simon and Schuster.
- Hanson, James. 2009. *Storms of My Grandchildren*. Bloomsbury USA.
- Hertsgard, Mark. 2011. *Hot*. Houghton Mifflin Harcourt.
- Karlenzig, Warren. 2010. *The Death of Urban Sprawl*. www.scribd.com/doc/63678481/CITIES-The-Death-of-Sprawl-by-Warren-Karlenzig.
- Muro, Mark, et al. 2011. *Sizing the Clean Economy*. Available for download at www.brookings.edu/metro/clean_economy.aspx.
- Rees, William R. *Revisiting Carrying Capacity: Area-Based Indicators of Sustainability*. dioff.org/page110.html.

Brian Czech

- Czech, B. 2000. *Shoveling Fuel For A Runaway Train: Errant Economists, Shameful Spenders, And A Plan To Stop Them All*. University of California Press, Berkeley. 210 pp.
- Czech, B. 2008. "Prospects for reconciling the conflict between economic growth and biodiversity conservation with technological progress." *Conservation Biology* 22(6):1389-1398.
- Czech, B. 2007. "The foundation of a new conservation movement: professional society positions on economic growth." *Bioscience* 57(1):6-7.
- Czech, B., and H. Daly. 2004. "The steady state economy: what it is, entails, and connotes." *Wildlife Society Bulletin* 32(2):598-605.
- Czech, B. 2001. "Incorporating nonhuman knowledge into the philosophy of science." *Wildlife Society Bulletin* 29(2):665-674.

Richard Gilbert

- Kowalski, Gary. 2003 *Science and the Search for God*. New York: Lantern Books.
- Kurtz, Paul. 2003. *Science and Religion: Are They Compatible?* Amherst, NY: Prometheus Books.
- McKibben, Bill. 2011. *Earth: Making a Life on a Tough New Planet*. New York: St. Martin's Griffin.
- Desmond, Adrian, and James Moore. 1991. *Darwin: The Life of a Tormented Evolutionist*. New York: W. W. Norton & Company.
- Dawkins, Richard. 2006. *The God Delusion*. Boston, New York: Houghton Mifflin Company.
- Horgan, John. 1996. *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age*. Helix Books. Addison-Wesley Publishing Company, Inc.

Ruben Nelson

- Heffernan, Margaret. 2011. *Willful Blindness: Why We Ignore the Obvious at Our Peril*. Doubleday. The root issue – our inability / unwillingness to see clearly, widely, and deeply.
- US Joint Forces Comand. *Joe 2010: Joint Operating Environment Report*. www.fas.org/man/eprint/joe2010.pdf
- Drucker, Peter F. 1993. *Post-Capitalist Society*. HarperCollins. A summary meditation by one of the elders of our tribe.
- Wright, Ronald. 2003. *A Short History of Progress*. House of Anansi Press. His 2003 CBC Massey Lectures.
- Berger, Peter L., Brigitte Berger, and Hansfried Kellner .1973 *The Homeless Mind: Modernization and Consciousness*. Random House. An exploration of the character of modern consciousness.
- Homer-Dixon, Thomas. 2006. *The Upside of Down: Catastrophe, Creativity and the Renewal of Civilization*. Alfred A Knopf. There will be a down. Will there be an up?

- Phillips, Kevin. 2008. *Bad Money: Reckless Finance, Failed Politics and the Global Crisis of American Capitalism*. Viking. See Timothy 6:10.
- Taylor, Grahame. 2008. *Evolutions Edge: The Coming Collapse and Transformation of Our World*. New Society Publishers. The best summary volume I know.
- Dyer, Gwynne. 2008. *Climate Wars*. Random House Canada. A walk on the darker side.
- Weisman, Alan. 2007. *The World Without Us*. St. Martin's Press. A marvelous romp.
- Nelson, Ruben. "Extending Foresight: The Case for and Nature of Foresight 2.0." *Futures*, Vol 42, #4. An exploration of the next generation of strategic foresight.
- Apaslan, Can M. and Ian I. Mitroff. 2011. *Swans, Swine and Swindlers: Coping with the Growing Threat of Mega-Crises and Mega-Messes*. Stanford University Press. Complexity applied to risk management.

Henry Pollack

- Pollack, Henry. 2009. *A World Without Ice*. Avery/Penguin.
- Archer, David and Stefan Rahmstorf. 2010. *The Climate Crisis: An Introductory Guide to Climate Change*. Cambridge University Press.
- Kolbert, Elizabeth. 2006. *Field Notes from a Catastrophe: Man, Nature, and Climate Change*. Bloomsbury USA.

Janet Ranganathan

- Living Beyond Our Means: Natural Assets and Human Well-being* – Statement of the Board of the Millennium Ecosystem Assessment. www.wri.org/publication/millennium-ecosystem-assessment-living-beyond-our-means-natural-assets-and-human-we.
- Restoring Nature's Capital: An Action Agenda to Sustain Ecosystem Services*. www.wri.org/publication/restoring-natures-capital.
- A New Approach to Feeding the World*. www.thesolutionsjournal.com/node/977.

Bron Taylor

- Bron Taylor's articles and books can be found or are introduced at www.brontaylor.com. A selection from these, and other recommendations for the IRAS conference, follow:
- Taylor, Bron. 2005. *Encyclopedia of religion and nature* (2 volumes). First ed. London and New York: Continuum International Publishers.
- Taylor, Bron. 2010. *Dark green religion: nature spirituality and the planetary future*. Berkeley & Los Angeles: University of California Press.
- Leopold, Aldo. 1949. *A Sand County Almanac*. New York: Sierra Club and Balentine Books. Reprint, 1968.
- Sample entries from the *Encyclopedia of Religion and Nature*, available at: www.religionandnature.com/ern/sample.htm. See especially:
- Deep Ecology
 - Environmental Ethics
 - Conservation Biology
 - The introduction to the encyclopedia is available directly at: www.religionandnature.com/ern/sample/Taylor--ERNIntro-with-cover.pdf.
- Stephen Kellert. *Connecting with Creation: the Convergence of Nature, Religion, Science and Culture*.
- Stephen Kellert. 2009. *A biocultural basis for an environmental ethic*. online at [www.brontaylor.com/courses/pdf/Kellert--BioculturalEnvironmentalEthic\(2009\).pdf](http://www.brontaylor.com/courses/pdf/Kellert--BioculturalEnvironmentalEthic(2009).pdf).

58th Annual IRAS Conference, *Saving the Future* Saturday, July 28 thru Friday, August 4, 2012

| PERIOD | ACTIVITY | Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|--|---|---|---|--|--|---------------------------|------------------------------|
| Morning Activities: Chapel and Plenary Lectures | | | | | | | | |
| 7:30-8:30 A.M. | Breakfast | | | | | Richard Gilbert | | |
| 8:30-9:15 A.M. | Chapel | | | | | | | |
| 9:30-10:25 A.M. | Lectures | | Henry Pollack | Bron Taylor | Ruben Nelson | V.V. Raman | Brian Czcek | All-Conference Discussion |
| 10:25-10:45 A.M. | Break | | Global Warning | Ethical Aspects | Adelaide's Lament | Energy | Steady-State Economy | |
| 10:45-11:45 P.M. | Discussion | | | | | | | |
| 11:45-1:00 P.M. | Lunch | | | | | | | |
| Afternoon Activities: Recreation, Seminar, Workshops, Free University, and Socializing | | | | | | | | |
| 1:00-1:50 P.M. | Choir Rehearsal Free Universities IRAS Seminar | Arriving, Getting Settled, Greeting Friends, Exploring | T. Deacon How Mind Emerged from Matter | Free Time to Enjoy Silver Bay | T. Deacon IRAS Seminar (J. Robertson) | IRAS Seminar (J. Robertson) | IRAS Annual Meeting | Poster Session |
| 2:00-2:50 P.M. | Session I Workshops | | P. Carr A. Balslev H. Fried T. Laurenson | | T. Deacon W. Bauman M. Moore | IRAS Seminar A. Lewis & M. Lewis Bercaw, Weiss-Fried, & Raman | Council Meeting | Memorial Service |
| 3:00-3:50 P.M. | Session II Workshops | Orientation | Klein & Robertson J. Long Evans-Mayhew | | T. Deacon J. Teske A. Lewis & M. Lewis | A. Lewis & M. Lewis S. Severino S. Katz | Council Meeting | Jacqueline Schwab Concert |
| 4:30-5:30 P.M. | Happy Hour | | | | | | | |
| 5:30-7:00 P.M. | Dinner | | | | | | | Banquet |
| Evening Activities: Plenary Lectures, Candlelight Services, and Late Evening Activities | | | | | | | | |
| 7:00-7:55 P.M. | Lectures | Opening Panel | R. Bercaw | IRAS Panel | Janet Ranganathan | Bron Taylor | Ruben Nelson | Variety Show |
| 7:55-8:10 P.M. | Break | | History of Growth | | Feeding the World | Role of Religion | Next Form of Civilization | |
| 8:10-9:00 P.M. | Discussion | | | | | | | |
| 9:10-9:40 P.M. | Candlelight | | | | | | | |
| 9:40 P.M.-? | | | | Snacks, Conversations, Dancing, and Socializing | | | | Closing Party |

Note: Silver Bay meals are buffet-style open seating at 7:30-9:00, 11:30-1:00, and 5:30-7:00. Coffee and continental breakfast are available from 6:30-7:30.

Saturday, August 4: Breakfast and depart.