

STATE UNIVERSITY ARIZONA

ASU Origins Project Newsletter

July 2012

From the Director

News



The previous year has been another eventful one for the Origins Project as we continue to expand our efforts throughout the University and beyond to explore key foundational questions from a research perspective while also raising public interest in these questions. It is at critical political junctures such as election years that the work that we do at the Origins Project becomes more important - without a clear and critical under-

standing of where we come from, how can we expect to progress responsibly as a society? Our 2011-2012 workshops and public events featured internationally renowned scholars discussing scientific advances in physical cosmology including recent discoveries at the Large Hadron Collider, to a lively debate on the cosmic development and evolution of 'something' from nothing, to the evolutionary trend toward xenophobia, and why this fear of others is now maladaptive for the future of humanity. This year also saw the recruitment of new staff, as Michelle Iwen took over from Pen Moon as Program Manager, and longtime Origins participant Manfred Laubichler agreed to become Associate Director of Origins, as he works to bring Origins projects and new programs in Complex Systems together more efficiently.

As we look forward to our 2012-2013 public events and workshops currently in development, we will feature workshops and public events on why we deceive ourselves and others, the origins of climate change, and the origins of superstition and religion. We are developing an exciting new online Origins course, and are considering an even broader Origins curriculum. In addition, we will embark this coming year on a new program to support students, faculty, and departments as they examine Origins issues. I look forward to joining you in discussions at our next event as we try and integrate our program even more broadly into the campus -Lawrence Krauss and the community.

Origins of Life Prize Announced

In June the Origins Project and OP board member, scientist Harry Lonsdale along with OP director Lawrence Krauss, announced the first winners of the Origins of Life Prize for the best research into the origins of life on earth. Prof. John Sutherland of Cambridge University and Prof. Matthew Powner of University College London will share the \$50,000 award and a \$150,000 grant for their research. For more information on other awardees and the prize, see www.originlife. org and asunews.asu.edu/20120606 originoflifechallenge.

Norm Perrill Origins Scholarship

In March, ASU Emeritus Prof. Norman Perrill generously endowed the Origins Project with scholarship funds. The scholarship will assist students who have an interest in Origins issues and demonstrate financial need as well as academic excellence. The first Norm Perrill Origins Project Scholar will be announced fall 2013.

Lawrence Krauss Wins Service Award

In May, Origins Project director Lawrence Krauss travelled to Washington DC to receive the National Science Board's Public Service Award for his career-long dedication to engaging the public about issues of scientific importance. At the black-tie Department of State awards ceremony, Krauss received a medal for his efforts as a public intellectual.

http://origins.asu.edu

originsproject@asu.edu

480/965.0053





EXPLORING OUR PLACE IN THE UNIVERSE

Coming Opportunities in Physical Cosmology Workshop *January 2012*

Co-sponsored by the ASU Cosmology Initiative, The Origins Project hosted a 3-day workshop for top scholars in the fields of cosmology, physics, and other disciplines, in order to probe the boundaries of fundamental physics. Attendant scientists came from CERN, Geneva University, and a host of top American universities to discuss the intersections of cosmological research and theoretical physics.



Clockwise from top: Lawrence Krauss and Richard Dawkins, Krauss and Dawkins, COPC workshop participants.

Space-Time, Quantum Mechanics, and the Large Hadron Collider Lecture

January 2012

As part of the COPC Workshop, Institute for Advanced Study Professor Nima Arkani-Hamed presented his research on recent discoveries in physics that were enabled by the Large Hadron Collider experiments. The packed lecture filled Discovery Hall as Prof. Arkani-Hamed led the audience through the interesting question of what happens to sub-atomic particles just beyond our smallest observable measurements.



Something From Nothing: A Conversation with Richard Dawkins and Lawrence Krauss *February 2012*

Richard Dawkins and Origins Project director Lawrence Krauss sold out Gammage Auditorium when they met for the highly anticipated discussion of how something comes from nothing. The evening featured a lively discussion ranging from the cosmic substance of 'empty' space, evolutionary biology, the ethics of religious belief and topics from Prof. Krauss' New York Times bestselling book, A Universe From Nothing. After a brief intermission, Profs. Dawkins and Krauss took questions from the audience, engaging in some spirited exchanges on the proper place of science in society. The Something From Nothing event kicked off a multi-city tour for the two speakers, including a follow-up event at the Sydney Opera House in Australia.





Origins of Xenophobia Workshop *March 2012*

Co-sponsored by the ASU Center for Social Dynamics and Complexity, the Origins Project hosted a 3-day workshop for an international panel of scholars researching issues of xenophobia from microbiologists, to historians and psychologists. The event proved a great success and has developed into an in-progress paper.

War and Peace in the World of Ants Lecture March 2012

As part of the Origins of Xenophobia Workshop, **ASU Foundation Professor** and Pulitzer Prize winner, Bert Hoelldobler presented his research on the alternating altruistic and war-like behaviors exhibited by various species of ants. The lecture included a video of ants exhibiting their posturing war dance prior to raiding other ant colonies. Prof. Hoelldobler's lecture provided a perfect entry point for the Xenophobia Great Debate.



Clockwise from top: Charles Blow, Xenophobia Workshop participants, Frans de Waal and Lawrence Krauss, and Bert Hoelldobler with an enthusiastic young scientist.





Xenophobia: Why Do We Fear Others? Great Debate *March 2012*

Co-sponsored by the ASU Center for Social Dynamics and Complexity, The Origins Project held a Great Debate event at Gammage Auditorium. Xenophobia: Why Do We Fear Others? featured a panel of 7 world-leading scholars and writers who discussed issues of xenophobia from the level of the microbe through to the large-scale economic and social influences of the fear of others. The panelists included economist Jeffrey Sachs, biologist Joan Strassmann, social psychologist Steven Neuberg, primatologist Frans de Waal, physicist Freeman Dyson, neuroscientist Rebecca Saxe, and journalist Charles Blow. The evening featured some lively debate on the origins of xenophobia and how humans can move beyond this now maladaptive evolutionary trait.

Exciting Upcoming Events

October 20, 2012 Great Debate: Origins of Deception with Noam Chomsky, Robert Trivers & others

February 1-2, 2013 Academic Workshop: Climate Change

February 2, 2013 Great Debate: Origins of Climate Change with Wallace Broecker & others

March 2013 Great Debate: Origins of Religion and Superstition

Support the Origins Project

Your gift supports expanding the human universe one element at a time by broadening scientific literacy through curricular initiatives, focused intellectual workshops, public events, and discussions. Donations can be made on our website at http://origins.asu.edu

Gift Levels

\$118 Origins Project Supporter

- One dollar donated for each known element
- Origins Symposium 9-DVD Collection

\$500 Origins Project Friend

- All of the Origins Project Supporter benefits *plus*
- Exclusive advanced notification of upcoming shows and ticket information

\$1000 Origins Project Society

- All of the Origins Project Supporter benefits *plus*
- Two VIP tickets to one Origins premier event

\$2500 Origins Project Circle

- All of the Origins Project Society benefits *plus*
- Four tickets to members only lunch or reception hosted by key scientific personalities

Did You Know?

You can watch all of the previous Origins Project Great
 Debate series on our website
 http://origins.asu.edu/media



 You can suggest Origins Project events. If you have great idea for a scientific lecture or Great Debate topic, let us know! http://origins.asu.edu/contact

Recent Origins Project Faculty Publications

- Lawrence Krauss, *A Universe From Nothing: Why There is Something Rather Than Nothing* (hardcover), Free Press, 2012
- Lawrence Krauss, Quantum Man: Richard Feynman's Life in Science (paperback), W.W. Norton & Co., 2012
- Manfred Laubichler et al, A Master of Science History: Essays in Honor of Charles Coulston Gillispie (chapter), Springer, 2012
- Manfred Laubichler et al, "The Challenges and Scope of Theoretical Biology," Journal of Theoretical Biology (article), 2011

The ASU Origins Project is an exciting transdisciplinary initiative that fosters new research and dialogue, partners to transform university and K-12 education, and advocates for science education and public engagement of science-related issues. For more information on supporting or partnering with the ASU Origins Project, please visit us on the web at http://origins.asu.edu

Coming Spring 2014

ASU ORIGINS PROJECT
5TH ANNIVERSARY FESTIVAL

A Celebration of Science and Culture Creativity. Science. Art