



**JOURNEY OF THE UNIVERSE EDUCATIONAL SERIES  
AVAILABLE ON DVD NOVEMBER 15, 2011**

**A Twenty-Part Series Featuring Scientists, Environmentalists, and Educators in  
Conversation with Mary Evelyn Tucker, Yale University**

The **JOURNEY OF THE UNIVERSE EDUCATIONAL SERIES** is an expansive, multidisciplinary project that re-imagines the universe story and the human role in the flourishing of the Earth community. The series invites viewers to become fellow travelers on an immense journey — from the beginnings of the universe, to the origins of life, to our current emergence as a planetary presence. This DVD set, consisting of twenty half-hour episodes, is designed to accompany the *Journey of the Universe* film, book (Yale University Press), and curriculum. It can be used for study in classrooms, community centers, and conferences and is available for purchase at <http://www.journeyoftheuniverse.org/buy>.

The first half of the series explores the development of the cosmos, life on Earth, and humans within the larger context of the story of the universe. It interweaves scenes from the *Journey of the Universe* film (scheduled for broadcast on PBS in December 2011) with conversations between Mary Evelyn Tucker and leading scientists such as Ursula Goodenough, Biology Department, Washington University; Joel Primack, Distinguished Professor of Physics, University of California, Santa Cruz; Terry Deacon, Anthropology Department, University of California, Berkeley; and Scott Sampson, Utah Museum of Natural History, University of Utah.

The second half of the series illustrates how this new integrated story of the cosmos is informing the ways in which we are creating a vibrant and sustainable Earth community. Here, Tucker interviews leading scientists, environmentalists, and activists on topics ranging from ecology to economics, from agriculture to art, from history to religion, and more. In these conversations, Richard Norgaard, Energy and Resources Program, University of California, Berkeley, talks with Tucker about ecological economics; Penny Livingston, Regenerative Design Institute, discusses biodiversity and agricultural practices; Richard Register, Ecocity Builders, reveals how cities are being re-imagined for sustainability; and Carl Anthony, Breakthrough Communities, explores the intersection of race, environmental justice, and sustainable communities.

**JOURNEY OF THE UNIVERSE** is the result of the collective inspiration of a 30-year-

friendship and collaboration between three visionaries in the fields of science, evolutionary philosophy, and world religions: Brian Thomas Swimme, Thomas Berry, and Mary Evelyn Tucker. Inspired by Berry's observation that humans are in-between stories — creation stories of the world's religions and the scientific story of the emergence of the universe — Swimme and Tucker worked together to create the **JOURNEY OF THE UNIVERSE** project. The educational series is the latest addition to the project, which consists of a book by Swimme and Tucker, published by Yale University Press (192 pages, \$25), and a documentary film, which premiered at Yale in March 2011 and is scheduled for a December 2011 national broadcast on PBS.

The **JOURNEY OF THE UNIVERSE EDUCATIONAL SERIES** is produced and directed by Adam Loftin and Patsy Northcutt. The executive producer and host is Mary Evelyn Tucker with creative development by Brian Thomas Swimme.

For further information visit: [www.journeyoftheuniverse.org](http://www.journeyoftheuniverse.org)

### **Episode Descriptions**

#### **1. "Beginning of the Universe"**

**Joel Primack, Distinguished Professor of Physics, University of California, Santa Cruz** describes the emergence of the universe, the universe's expansion, and the formation of the first elements, stars, and galaxies. This conversation also includes explanations of cold dark matter and dark energy.

#### **2. "Galaxies Forming"**

**Todd Duncan, Science Integration Institute, Portland** and **Joel Primack, Distinguished Professor of Physics, University of California, Santa Cruz** explore the formation of galaxies from the hot, energetic state of the early universe. These interviews cover topics ranging from the shapes of galaxies to the formation of the Milky Way.

#### **3. "The Emanating Brilliance of Stars"**

**Todd Duncan, Science Integration Institute, Portland** and **Joel Primack, Distinguished Professor of Physics, University of California, Santa Cruz** describe the emergence and death of stars. They trace the elements found in all life on Earth, including those found in our bodies, back to supernova explosions.

#### **4. "Birth of the Solar System"**

**Craig Kochel, Geology Department, Bucknell University, Lewisburg, PA** describes the evolution of our solar system and its planets. Included in this conversation are the origins of the Moon, the creative dynamism of plate tectonics, and the impact of geology on Earth's biology.

#### **5. "Life's Emergence"**

**Terry Deacon, Anthropology Department, University of California, Berkeley** and **Ursula Goodenough, Biology Department, Washington University, St. Louis** explore the complexities of the emergence of the first cells, the intricate patterning found in DNA and

multicellular organisms, and the awareness of single-celled organisms.

#### **6. “Learning, Living and Dying”**

The evolution of the brain is a story of adaptation, consciousness, and responsiveness that begins with single celled organisms and continues through the vertebrates. Here, **Terry Deacon, Anthropology Department, University of California, Berkeley** compares the adaptive brains of humans, chimpanzees, and our many evolutionary ancestors.

#### **7. “The Passion of Animals”**

**Scott Sampson, Utah Museum of Natural History, University of Utah** tells the compelling story of Earth’s fossil record. Touching on topics ranging from the ancient ecosystems of dinosaurs to the co-evolution of the human with other species, this interview highlights the importance of understanding mass extinctions.

#### **8. “The Origin of the Human”**

Drawing upon the history of early humans and highlighting contemporary indigenous lifeways, **John Grim, School of Forestry and Environmental Studies, Yale University** and **Melissa Nelson, American Indian Studies, San Francisco State University** explain the sustaining power of ritual and celebratory acts that locate humans within the rhythms of Earth’s transformative systems.

#### **9. “Becoming a Planetary Presence”**

**Cynthia Brown, Professor Emerita, Dominican University of California** describes the “big history” approach to understanding the role of the human in relation to the historical unfolding of the cosmos and Earth. She highlights key threshold moments of evolutionary change.

#### **10. “Breakthrough Communities”**

**Carl Anthony, Founder, Breakthrough Communities, Oakland, CA** tells how the universe story expanded his own understanding of race and environmental justice. With a focus on urban and metropolitan areas, he explains the practical implications of a functional cosmology for sustainable community development.

#### **11. “Eco-Cities”**

By emphasizing an organic and evolutionary whole-city perspective, **Richard Register, Ecocity Builders, Berkeley** draws attention to the imaginative ways in which cities are being rethought and rebuilt around the planet for a flourishing, sustainable future.

#### **12. “Ecological Economics”**

**Richard Norgaard, Energy and Resources Program, University of California, Berkeley** surveys the history of human economies and the myths and premises of current economic practices. In place of our ecologically destructive practices, he endorses an ecological economics that emphasizes care, co-evolution, and protection of the environment.

#### **13. “Permaculture”**

**Penny Livingston, Regenerative Design Institute, Bolinas, CA** leads viewers through the history and significance of permaculture. She discusses permaculture as an agricultural practice that increases biodiversity and helps us to understand our place in the story of the universe.

#### **14. “Indigenous Ways of Knowing”**

**David Begay, Adjunct Professor, Department of Physics and Astronomy, Northern Arizona University** and **Nancy Maryboy, President and Founder of Indigenous Education Institute**

invite us to understand Navajo ways of knowing. They describe a worldview that is place-based, emphasizes kinship and connection, and intimately orients the human within an interrelated and unified cosmos.

#### **15. “Sustainable Energy”**

**Paula Gonzalez, SC, EarthConnection, Cincinnati** also called “the solar nun,” narrates the efforts of Catholic sisters and others to harness solar power and other natural systems as a means of protecting the sacred Earth community and participating in the story of the universe.

#### **16. “Healing and Revisioning”**

**Belvie Rooks, Co-Founder, Growing a Global Heart, Elk, CA** describes how teaching the story of the universe has empowered African American youth to contextualize slavery, envision healing and reconciliation, and imagine a better future through a broader sense of self and of place.

#### **17. “Arts and Justice”**

Whether through poetry and activism, the study of science, or participating in a Crow Sundance, **Drew Dellinger, Founder, Planetize the Movement, Berkeley** and **Marya Grathwohl, OSF, Writer and Founder, Earth Hope, Wyoming** express shared visions of creative transformation that are inspired by the journey of the universe.

#### **18. “Myths, Metaphors, and Identities”**

**Nancy Abrams, Attorney and Co-Author, *The New Universe and the Human Future*** and **Sachiko Kawamura, Department of Psychology and Human Relations, Nanzan University, Nagoya, Japan** highlight the ways in which human relations have been broadened and deepened within a cosmological context.

#### **19. “Teaching the Journey of the Universe”**

**Tom Collins, Religion and Philosophy Department, The Lawrenceville School, Princeton, NJ** and **Bindu Mohanty, Teacher, Auroville, India** describe how learning the universe story has allowed high school and college students to experience an expanded sense of self and to transform despair into a sense of hope and empowerment.

#### **20. “Conclusion”**

**Mary Evelyn Tucker, Co-Director, Forum on Religion and Ecology, Yale University**

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