Rosa Barba & Heidi Newberg
On the Speculative Intersection of Astronomy and Art
TUE / MAR 03RD
12:00 PM
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A conversation about the speculative intersection between astronomy, art, and time, featuring artist-in-residence Rosa Barba and Heidi Newberg, professor of Physics, Applied Physics, and Astronomy at Rensselaer.

Rosa Barba’s two-part installation is currently in production at EMPAC, in collaboration with Rensselaer’s Hirsch Observatory, and will be presented in March 2015. EMPAC’s 8th Street façade will be transformed into an outdoor cinema that uses the solar system as source material for a speculative film, while a site-specific artwork for the Hirsch Observatory will visually connect the two buildings across campus.

The large-scale projection covering EMPAC’s 8th Street façade will be viewable from downtown Troy and beyond, and the accompanying sound composition will broadcast locally over a radio frequency. Using voices collaged by composer Jan St Werner from interviews, fictions, and readings by artists and astronomers from around the world, the piece hovers at the speculative intersection of astronomy and art.

A concurrent 70mm film installation at the Hirsch Observatory, The White Museum, will project out of the dome and into the sky. Located on the roof of the Jonsson-Rowland Science Center, the observatory was built in 1942 to house a 12” equatorial reflector telescope that was designed and constructed at RPI. Juxtaposed against the current 16” Boller & Chivens dome telescope built in the 1960s, the film projector traces the reciprocal relationship of astronomy and cinema.

This new commission is being produced in collaboration with Rensselaer students Nicholas Palmieri, Jake Weiss, and Thomas Hartmann.

CURATOR: VICTORIA BROOKS

Biographies

Heidi Newberg has worked in many areas of astronomy over the course of her career. A fellow of the American Physical Society, and professor of Physics, Applied Physics, and Astronomy at Rensselaer, Newberg’s current research is primarily related to understanding the structure and evolution of our own galaxy, using stars as tracers of the galactic halo and disks. These stars, in turn, are used to trace the density distribution of dark matter in the Milky Way.

Newberg did her PhD with the Berkeley Automated Supernova Search, and the Supernova Cosmology Project (SCP), and she shared the Gruber Cosmology Prize for her work with SCP. She has helped to build the Sloan Digital Sky Survey (SDSS), which imaged ~10,000 square degrees of the sky in five optical filters, and obtained over a million spectra of galaxies. She initiated the Sloan Extension for Galactic Understanding and Exploration (SEGUE) project in SDSS II, which obtained spectra for 250,000 galactic stars. She has published papers in diverse areas of galactic and extragalactic astronomy, including supernova phenomenology, measuring cosmological parameters from supernovae, galaxy photometry, color selection of QSOs, properties of stars, astronomy education, and the structure of our galaxy. Newberg is the head of Participants in LAMOST, US (PLUS), which, in collaboration with the Chinese LAMOST project, has so far obtained ~2 million spectra of galactic stars, using a new 4m-class telescope that can obtain spectra for 4000 objects at the same time. She also runs MilkyWay@home, a volunteer computing platform that supplies about a PetaFLOP of computing power (equivalent to the largest supercomputers) to her research projects, which include finding the best model of the Milky Way and running n-body simulations of Milky Way evolution.

Rosa Barba’s publications, sculpture, and installation work are rooted in the material of cinema. In 2010, she won the Nam June Paik Award for Coro Spezzato, The Future Lasts One Day (2009), based on a multi-choral performance in which each member of the choir is represented by an individual film projector displaying the sung text. She was a resident artist at Artpace in San Antonio in 2014, Chinati Foundation in Marfa in 2013 and the Dia Art Foundation in 2008. Her work has been presented in exhibitions worldwide, including Time As Perspective (2013) at the Bergen Kunsthall; Auto Kino! (2010) at the Temporäre Kunsthalle Berlin; Making Worlds at the 53rd Venice Biennale in 2009; and Italics: Italian Art Between Tradition and Revolution, 1968-2008 (2008-9) at the Palazzo Grassi in Venice and at the Museum of Contemporary Art, Chicago.
STAFF

Johannes Goebel / Director
Geoff Abbas / Director for Stage Technologies
Eric Ameres / Senior Research Engineer
Argeo Ascani / Curator, Music
David Bebb / Senior System Administrator
Peter Bellamy / Senior Systems Programmer
Michael Bello / Video Engineer
Victoria Brooks / Curator, Time-Based Visual Arts
Eric Brucker / Lead Video Engineer
Ash Bulayev / Curator, Dance + Theater
Michele Cassaro / Guest Services Coordinator
John Cook / Box Office Manager
Roxanne De Hamel / Web Developer
David DeLaRosa / Production Technician
Zhenelle Falk / Artist Services Administrator
William Fritz / Master Carpenter
Kimberly Gardner / Manager, Administrative Operations
Ian Hamelin / Project Manager
Katie Hammon / Administrative Specialist
Ryan Jenkins / Senior Event Technician
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Pamela Keenan / Production Technician
CathyJo Kile / Business Manager
Eileen Krywinski / Graphic Designer
Carl Lewandowski / Production Technician
Eric Chi-Yeh Lin / Lead Stage Technician
Stephen McLaughlin / Senior Event Technician
Josh Potter / Marketing and Communications Manager
Alena Samoray / Event Technician
Candice Sherman / Business Coordinator
Avery Stempel / Front of House Manager
Kim Strosahl / Acting Production Administrative Coordinator
Jeffrey Svatek / Audio Engineer
Dan Swalec / Master Electrician
Todd Vos / Lead Audio Engineer
Pete Wargo / Manager, Information Systems
Michael Wells / Production Technician

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