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UCSB Conference Examines Digital Imaging in Art, Science, Medicine

Consumers are aware of the digital revolution in video products, where DVDs have replaced videocassettes and digital cameras are nudging aside film photography.

But the revolution has had impacts that extend far beyond the shelves of the video store or camera shop.

An international cast of scholars, artists, scientists, and engineers will come to the University of California, Santa Barbara Friday, March 4 and Saturday, March 5 to discuss those impacts in "Calculating Images: Representation by Algorithm in Medicine, Science, and Art," a conference that will explore the many uses of digital imaging.

Speakers will illustrate their talks with images of such diverse subjects as the human brain and the planets and moons of our solar system.

"There will be lots of digital images shown," said conference organizer Sven Spieker, a professor of Germanic, Slavic, and Semitic Studies at UCSB, who prefers the term algorithmic to digital in referring to the images. "The conference tries to open up new ways of looking at algorithmic images."

"Calculating Images" is free and open to the public on a first-come, first-served basis. It will be held in the McCune Conference Room of the Humanities and Social Sciences Building (Room 6020). It runs from 9 a.m. to about 9 p.m. on Friday and

from 9 a.m. to about 5:30 p.m. on Saturday.

All of the speakers are well known within their disciplines, Spieker said. But the two perhaps of most interest to the public are Mark Cohen, director of the UCLA Brain Mapping Center, and Eric de Jong, chief imaging engineer at the Jet Propulsion Lab at Caltech. De Jong designs the algorithms used to visualize the data sent to earth during NASA's unmanned space missions.

Cohen's talk, "Seeing (and) the Brain," begins at noon Friday and will show how magnetic resonance imaging is used to detect the workings of the mind. "Through this chink in the armor separating mind from brain, we have been given an unprecedented view of the private experience of self," Cohen said.

De Jong's presentation at 4 p.m. Friday will cover "The History of Images and Associated Algorithms in the Exploration of the Solar System." Spieker said De Jong would bring his own crew to show images of JPL space exploration.

Others speakers and talks include:

· Wolfgang Hagen, (who will appear via video conferencing technology from Berlin), "There is No Such Thing as a Digital Image: Some Media-Epistemological Remarks on ‘Weak Ontology'"

· Harun Badakhshi, Charité Hospital, Berlin, "The Body in Numbers: Medical Imaging Strategies and Technologies"

· Luc Jaeger, UCSB assistant professor of chemistry and biochemistry, "RNA Nano-Cathedrals: Building Algorithmic Architectures at the Nano-Scale"

· James Elkins, Art Institute, Chicago, "Limits of Picturing in Astrophysics and Quantum Mechanics"

· Marcos Novak, UCSB assistant professor materials and art, "Transvergent Beauty: Computation and Alloaesthetics"

· Manuela de Barros, University of Paris 8, "From Renaissance Geometry to the Code of Life: Scientific Models in Art"

"Calculating Images" is supported by UCSB's Interdisciplinary Humanities Center; the Goethe Institute of Los Angeles; the Consulate General of France; CNRS Paris; and

UCSB's College of Letters and Science, Office of the Provost, Office of Research, Department of Germanic, Slavic, and Semitic Studies, Department of History of Art and Architecture, and Comparative Literature Program.

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Conference Web Page

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