

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
New Worlds - Innovative Space Education and Outreach (7)Author: Ms. Daniela de Paulis  
The NetherlandsVISUAL MOONBOUNCE: A NEW APPLICATION OF MOONBOUNCE TECHNOLOGY FOR  
COMMUNICATING SCIENCE THROUGH ART**Abstract**

Visual Moonbounce is a new application of Moonbounce technology conceived by visual artist Daniela de Paulis in collaboration with the CAMRAS radio amateur association based at Dwingeloo radio telescope in The Netherlands. Visual Moonbounce consists in sending digital images as radio waves, from one radio station to another radio station on Earth, using the Moon as a natural satellite. The technology has been widely used by Daniela de Paulis in her Art project OPTICKS, during which images submitted by the audience are sent to the Moon by a radio station in Brazil or the UK, reflected back by the Moon's surface and received by the Dwingeloo radio telescope antenna. The images are projected live in the exhibition space (Planetarium, classroom) while they are received by Dwingeloo radio telescope. Daniela de Paulis has used Visual Moonbounce in other projects such as the recent short film 'le Voyage dans la Lune'. She has performed OPTICKS as part of educational programmes both for the general public and young learners, in collaboration with several educational institutions, including the Holland Space Center, Museon, ESA, UNAWE. OPTICKS was also presented in April 2011 as a live performance during Global Astronomy Month, an international event for science outreach created and coordinated by Astronomers Without Borders. The Visual Moonbounce technology will be presented with a short recorded performance of OPTICKS, technical details, together with the artistic and scientific aspects of Visual Moonbounce research will be highlighted. Particular focus will be given to the links between Visual Moonbounce, outreach and educational activities. Images that have been bounced off the moon as radio waves will be shown and commented by the artist. Applications of Visual Moonbounce for science outreach activities will be described based on the collaboration with Astronomers Without Borders and other scientific organizations. Daniela de Paulis has presented her research on Visual Moonbounce as educational tool at the EPSC-DPS meeting in Nantes in October 2011 and at UNAWE, Leiden University, in December 2011. Daniela de Paulis (PhD research, artist and submitter of the abstract) will be attending the meeting in Naples. Information on Visual Moonbounce can be found on <http://www.opticks.info/blog/> <http://lunarscience.arc.nasa.gov/articles/live-earth-moon-audio-visual-performance> <http://www.astronomerswithoutborders.org/programs/all-programs/661-opticks.html> <http://camilla-corona-sdo.blogspot.com/2011/04/beam-me-to-moon-april-10-2011.html>