

IAA Study Group Status Report

Responsible Commission:

Study Number and Title: SG1.12 Virtual Reality

Short Study Description

Virtual Reality (VR) is a computer-simulated environment able to simulate physical presence in remote places real or artificially created. Most current virtual reality applications are primarily visual experiences, displayed either on a computer screen or through special stereoscopic displays, such as special goggles, but may include additional sensory information: sound, tactile information, temperature and so on. Furthermore, virtual reality allows providing virtual presence of users with the concepts of telepresence and telexistence or a virtual artifact (VA).

Another kind of virtual reality technique is the Telerobotic. With a specially designed glove worn by an operator, it is possible to control a robotic arm located at a distant place. This can be applied to tasks such pick up some rock samples on the Moon or on a NEO or operate in a poorly known or hostile environment as a lunar lava tube by a robotic arm controlled by an operator on Earth wearing a special robotic data glove.

Interfaces with Terrestrial Analogues study also established

Progress in past six months:

We are looking at availability of hardware and software worldwide with a goal to compile a database of existing or prospective facilities.

We are also following up the interested manifested by a number of emerging countries and trying to involve them. New membership is being put together.

Website Study Information up to date? (Study Group Membership, Study Plan and Schedule):

Membership needs update

Issues requiring resolution? (recommend approach):

No issues.

Product Deliveries on Schedule? (If modified explain rationale):

Yes.

Study Team Member Changes? (List any Study Team Members that you wish to discontinue, and provide names plus contact coordinates of any Members you wish to add on the second page of this Study Update form.) Note: Complete contact information including email, tel. and fax must be provided for all additions. Only Members with complete contact information will be listed and receive formal appointment letters from the IAA Secretariat.)

Name of person providing Study Group Status (Study Group Chair or Co-Chair):

Prof. Marcello Coradini, Academician and Chairman of the study group

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or

Marcello.coradini@jpl.nasa.gov

Status Report Date: March 04, 2014

Study Team Membership Changes

Effectivity Date:

Tom Komarek - tomas.a.komarek@jpl.nasa.gov as of February 2015

Dan Lester dfi@astro.as.utexas.edu Invited letter of appointment pending

Roberto Trucco roberto.trucco@altec.space.it letter of appointment pending

Maurizio Pajola Maurizio.pajola@gmail.com letter of appointment pending

Discontinue: None