SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Calling Planet Earth - Space Outreach to the General Public (6)

Author: Mr. Bastian Olberts
University of Stuttgart, Germany, olberts@irs.uni-stuttgart.de

Mr. Boris Bonev
Jugendforschungszentrum Herrenberg-Gäu Aerospace Lab e.V., Germany, bonevbs@googlemail.com
Mr. Alexander Heckmann
University of Stuttgart, Germany, alexander.heckmann@t-online.de
Mr. Frank Herzog
University of Stuttgart, Germany, *(email is not specified)*
Ms. Serina T. Latzko
University of Stuttgart, Germany, serina.latzko@web.de
Mr. Marvin Schneider
Jugendforschungszentrum Herrenberg-Gäu Aerospace Lab e.V., Germany,
mrmarvinschneider@googlemail.com
Prof. Ernst Messerschmid
University of Stuttgart, Germany, messerschmid@irs.uni-stuttgart.de

AIRM - THE LINK BETWEEN MISSION ANALYST AND THE GENERAL PUBLIC

Abstract

Communicating complex results from scientific research to the general public can be difficult when dealing with multi-dimensional problems. Moving pictures are the most accessible form of information, mainly used by professional artists but hardly by mission analysts which can lead to artist impressions rather than realistic animations. Funding for professional videos is only available for larger projects. This paper presents AIRM (Animation of Interplanetary and Reentry Missions) which provides a set of plugins for the open source, cross platform animation software Blender. These plugins allow for an easy, semi-automatic import of trajectory and spacecraft attitude data as well as the reentry flow from CFD simulations. The ultimate output is either a regular video file or a stereoscopic format suitable for 3D projectors. The 3D output is very suitable for complex trajectories through libration points. Exemplary videos including a reentry and a Weak Stability Boundary Transfer are presented.