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Interactive Presentations - 29th IAA SYMPOSIUM ON SPACE AND SOCIETY (IP)

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COSMIC DANCER 2.0 ON THE INTERNATIONAL SPACE STATION

**Abstract**

Cosmic Dancer 2.0 is an art intervention planned to be realized on the International Space Station (ISS) in 2018. As such, it will utilize the Additive Manufacturing Facility (AMF) - a gravity independent 3D printer aboard the station. Due to the zero-g environment of space, a specialized design approach requires the Cosmic Dancer 2.0 to be printed in several sections and then assembled by the astronaut crew. The actual dimensions of Cosmic Dancer 2.0 will be determined during the prototyping phase by NASA's interface partner Made In Space, Inc. A photographic and video documentation will be made of this prototyping process as well as of the actual realization on the ISS.

Cosmic Dancer 2.0 has been under development since September 2017. Public participation via exhibitions, presentations, websites, social media and crowdfunding action is planned and under development. Solid 3D prints of the sculpture in various sizes have been successfully made as well as the first prototype 3D printed sections necessary for assemblage on the ISS.

As it is planned to be realized this year, Cosmic Dancer 2.0 will also commemorate the realization of the first three-dimensional artwork to be specifically conceived for and officially realized in a space habitat. 25 years ago, on May 22, 1993, my Cosmic Dancer sculpture was launched to the Russian Mir space station. This sculpture was a painted, aluminum geometric form measuring 35 x 35 x 40 cm and weighing exactly 1 kg. Its purpose was to investigate the properties of sculpture in weightlessness and to evaluate the integration of art into the human space program. Cosmic Dancer 2.0 furthers these objectives and should provide additional inspiration to other artists interested in space exploration and development while expanding the cultural dimension of human space activities. In contrast to the 1993 mission, Cosmic Dancer 2.0 will be returned to Earth.

Cosmic Dancer 2.0 Website [http://cosmicdancer.com/cosmic\\_dancer2.0.php](http://cosmicdancer.com/cosmic_dancer2.0.php)  
Cosmic Dancer Project Videos: [http://cosmicdancer.com/cosmic\\_dancer\\_project\\_videos.php](http://cosmicdancer.com/cosmic_dancer_project_videos.php)