

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
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INTERUNIVERSITY ORGANIZATION OF THE SPACE STATION DESIGN WORKSHOP

Abstract

The Space Station Design Workshop (SSDW) has been organized by the Institute of Space Systems (IRS) at the University of Stuttgart since 1996. The goal of the one-week workshop is the conceptual design of a human spaceflight mission. Each year, a specific mission statement is provided, based on the current international situation and future plans. During the week, 40 participants (students and young professionals) are divided in two teams and guided by a team of experts from universities, space agencies and industry. The international and interdisciplinary workshop is widely recognized, with an alumni network all over the world. During the workshop participants put in practice what they have learned in theory during their studies, while also engaging with soft skills, such as teamwork, critical thinking and presentation skills. Since the conceptual design needs to be created in a short period of time, several tools and guidance are provided prior to the Workshop by the SSDW organization team. The lessons learned from the past 25 years have helped to improve this guidance process and its efficiency, while also ensuring that it does not compromise the creativity and the “out-the box thinking” of the participants. In 2024 the SSDW will go through a major change, while still maintaining its essence. The workshop will be organized by two new professorships from two German universities: the newly created Human Spaceflight Technology Professorship at the Technical University of Munich (TUM), lead by Prof. Detrell, and the newly appointed professor of Human Spaceflight and Exploration at the University of Stuttgart, Prof. Olthoff. The co-organization of such a workshop provides new advantages while posing new challenges. In 2024 the workshop will physically take place in Munich (Germany) in August. This paper will present the experience of the first interuniversity organized SSDW, show the results and participants’ feedback obtained during the workshop and highlight the lessons learned for future workshops.