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## SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

New Worlds - Innovative Space Education and Outreach (7)

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## SPACE CLEAN UP- AN OUTREACH PROGRAM FOR SPACE DEBRIS AWARENESS BY EUROAVIA TOULOUSE

## Abstract

EUROAVIA is the European Association of Aerospace Students founded in 1959 as a non-profit organisation to motivate students and young professionals in the field of Aeronautics and Space. This year, EUROAVIA Toulouse organised a space awareness outreach symposium, Space Clean Up between 10th and 14th October, 2014. Space debris has been a global issue with both governments and corporate sector trying to design and invent novel solutions for space debris removal before it becomes a future crisis. The main purpose of the event was to educate undergraduate and graduate students on the issues around space debris and how they, as students can be involved in contributing to foster solutions. The symposium reached more than 2000 international students across all Europe and around 50 students, experts and professors got together in Toulouse. Experts from CNES and Airbus Space Defence joined the symposium as a part of the discussion panel and provided an unique combination of academic and industrial insight into the topic. Furthermore, to understand the legal aspects about space debris, an expert in the field of Space law and mitigation also joined the discussions. The participants were sorted in multicultural teams supported by graduate students working in parallel projects on Cubesats in ISAE-SUPAERO who shared their experiences and challenges they faced while designing Cubesats. In order to understand the issues at hand in a more practical way, the teams were then given a task to design a viable solution to Space Debris removal using the Cubesat platform taking in account the constrains set by them. In the framework of our space outreach programme, participants visited the Cite l'Espace where they had the opportunity to view the Philae landing along with other space enthusiasts of Toulouse. In addition, they also had a full immersion in the corporate world by visiting Airbus Group facilities in Toulouse. Finally, the participants came up with novel ideas (detailed in the paper) which were presented to an expert panel from both academia and industry. The responses of the judges to the participants' presentation were astute and inspiring. In conclusion, EUROAVIA's commitment and support has been a valuable asset to organise this symposium and is in lieu with their motto to inculcate space education in young minds.