

Mission Automatisée de Maintenance en Orbite des Satellites (AMOOS)

International Space University (ISU) – Space Studies Program (SSP) 2014

Invitation Conférence

Le LASSENA est heureux de vous convier à une conférence internationale dans le cadre du projet AMOOS de l'ISU SSP 2014

Mercredi le 18 juin 2014

Salle A-1150 (Amphithéâtre)

De 17h30 à 18h30

En anglais

Steve Ulrich, Carleton University

Advanced GN&C Systems for Autonomous Spacecraft Robotics Operations

--Recent Results from ISS--

To approximate the dynamics that is encountered during such missions, the MIT Space Systems Laboratory developed the SPHERES (Synchronized Position Hold, Engage, Reorient, Experimental Satellites) laboratory facility to provide researchers with a long term and upgradable experimental testbed for the validation of advanced GN&C systems for use in formation flying, rendezvous and docking, and reconfiguration mission scenarios. The facility consists of three nanosatellites, which can control their positions and orientations, and is operable in a 2-D laboratory environment, on NASA's KC-135 (reduced gravity aircraft), and on the ISS.

This lecture will provide an overview of the MIT's SPHERES facility, recent on-orbit SPHERES-ISS results in the areas of real-time path planning, advanced control systems, and vision-based navigation, as well as on-going research projects at Carleton University relevant to on-orbit servicing.

Steve Ulrich is Director of the Spacecraft Robotics and Control Laboratory and Assistant Professor in the Department of Mechanical and Aerospace Engineering at Carleton University.



L'École de technologie supérieure (ÉTS) et HEC Montréal accueillent la 27^e édition du programme d'études spatiales (SSP14) de l'International Space University (ISU) du 9 juin au 8 août 2014.