

ACT NEWS

Thinking Tomorrow - Conference

For the occasion of the 10th anniversary of the team, a two days event will take place on 2-3 July at ESTEC (NL) to review and analyse trends in advanced space research and identify ACT research directions for the next ten years. Join us at the first European space un-conference on the 2nd and the plenary event on 3rd of July. (sign up [here](#))

SOCIS

ESA Summer of Code In Space ([SOCIS 2012](#)) starts! Following last years success of its first edition organized by the ACT, mentoring organization (i.e. open source space-related projects) can apply with projects before 15/07/2012 for this years' SOCIS. It funds student opportunities to develop, code for space related open source projects.

Suaineadh

A net deployment experiment in microgravity, initiated by the team and conducted by the universities of Glasgow, Strathclyde and KTH in Stockholm has been launched on March 19th on a Rexus sounding rocket.

Relativistic Positioning Systems-call for abstracts

Together with the Univ. of Ljubljana, we organise the 1st int. workshop on "Relativistic Positioning Systems and their Scientific Applications" (Brdo, Slovenia, 19-21 Sep.12). Abstracts before: 1 July 2012 (no reg. fee; proc. published) <http://rgnss.fmf.uni-lj.si/workshop>

All ACT Publications

ARIADNA NEWS

Recently started Ariadna Studies

The ACT has teamed up with universities to study further the following new research topics:

- Subsurface investigation and interaction by self-burying bio-inspired probes (12-6401) with [Univ. of Florence](#), (Dep. of Plant, Soil and Env. Science)
[Study Description](#), [project site](#)
- Kinetic modelling of the jet extraction mechanism in spherical IEC devices (12-3201) with [Univ of Stuttgart](#)
[Study Description](#), [project site](#)
- Probabilistic Computing for Efficient Robotic Vision in Space (12-5101) with [Carleton University](#)
[Study Description](#), [project site](#)
- Mimicking the thigmotactic behaviour of climbing plants to design a tactile-based grasping device for the space environment (12-6402) with [Univ. of Bozen-Bolzano](#)
[Study Description](#), [project site](#)
- Space Gaits (12-5201) with [Nat. Techn. Univ. of Athens](#)
[Study Description](#), [project site](#)

Recently finished Ariadna Studies

- Analytical Perturbative Theories in Motion in Highly Inhomogeneous Gravitational fields (11-5201) with [Univ. of Strathclyde](#) (Adv. Space Concepts Lab)
[Initial Study Description](#), [Final report](#)

[Youtube channel](#) with Ariadna executive presentations

GENERAL ESA NEWS

Invitations to Tender (ITTs)

The European Space Agency periodically issues Invitations to Tender on a broad range of subject areas and activity types. A list of both upcoming and currently open ITTs can be accessed at [EMITS](#).

Some potentially interesting studies for universities include:

- [AO7023](#) Design of a crushable TPS for the ERC
- [AO6124](#) Open call for proposals for Artes 20 (Int. Applic. Promotions Progr.)
- [AO7197](#) 12 - SYSNOVA: R&D Studies competition for innovation (Seals sustainable near Earth access and life support)
- [AO7103](#) Additive layer manufacturing
- [AO7177](#) High specific stiffness metallic materials

UPCOMING CONFERENCES AND EVENTS

- ➡ - 2-3 July: "Thinking Tomorrow", ESTEC (NL) Conference at the occasion of 10 years of ACT
- 2 July: 1st Europ. Space Un-Conference
- 3 July: Plenary event
- 12-14 September: Brussels, Ants 2012: Eighth International Conference on Swarm Intelligence
- 1-5 September: Taormina PPSN 2012 : 12th International Conference on Parallel Problem Solving From Nature
- 19-21 September: 1st international workshop on "Relativistic Positioning Systems and their Scientific Applications" (Brdo near Kranj, Slovenia, 19-21 September 2012).

Check out also ESA's conference portal:

<http://conferences.esa.int>

ACT PERSONNEL

While Paul Konstantin Gerke and Lionel Jacques left the team, we welcome our new colleagues: Aurélie Héritier, Johannes Simon, Marcus Märten, Alexandre Kling, Simona Martana and Helia Sharif.

Current ACT team members are Alexandre Kling, Aurélie Héritier, Camilla Pandolfi, Dejan Petkow, Duncan Barker, Guido de Croon, Helia Sharif, Johannes Simon, Luke O'Connor, Marcus Märten, Sante Carloni, Simona Martana, Veronica Ramos, Dario Izzo and Leopold Summerer ([all ACT members](#)).

About the ACT: The aim of ESA's Advanced Concepts Team is to perform, monitor and foster research on advanced space systems, innovative concepts and working methods.