

ARIADNA NEWS

Ariadna Call for Proposals 2012/01 and Ariadna Call for Ideas 2012/01 released

The **call for proposals** contains five new research topics:

- Subsurface investigation and interaction by self-burying bio-inspired probes (12-6401)
([Study Description](#))
- Kinetic modelling of the jet extraction mechanism in spherical IEC devices (12-3201)
([Study Description](#))
- Probabilistic Computing for Efficient Robotic Vision in Space (12-5101)
([Study Description](#))
- Mimicking the thigmotactic behaviour of climbing plants to design a tactile-based grasping device for the space environment (12-6402)
([Study Description](#))
- Space Gaits (12-5201)
([Study Description](#))

The **call for ideas** is for research proposals on

- Innovative Wireless Power Transmission
([Call Description](#))

Deadline for proposals for both calls: **06 March 2012!**

Please feel encouraged to spread the information to potentially interested colleagues and friends.

To download the full Invitation to Tender (ITT) you need to go to [EMITS](#) – please search for the tender numbers A07047 and A0705 under “Open Invitations”. The pdfs of the study descriptions are available here: [CfP](#), [CfI](#)

ACT NEWS

SOCIS: All student projects on open sources space software projects have been finished during ESA's first Summer of Code in Space (SOCIS)

PaGMO/PyGMO: The open source PaGMO/PyGMO scientific library has been released in version 1.0.0 in the form of a C++ library (PaGMO), or Python 2.7 module (PyGMO) compatible with all major hardware platforms. PaGMO/PyGMO allows for massively parallel engineering optimisation.

Publications: All 37 publications by ACT researchers published in 2011 are available on <http://www.esa.int/gsp/ACT/publications/index.htm>

Suaineadh: a net deployment experiment in microgravity, initiated by the team and conducted by the universities of Glasgow, Strathclyde and KTH in Stockholm is currently scheduled for launch in March on a Rexus sounding rocket.



Since 2009, the team has been filming the executive presentations of the Ariadna studies. You can watch them, alongside other videos of the team, on our [Youtube channel](#).

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:

- A07015: SYNTHETIC GENERATION OF A NEO POPULATION
- A07048: HELICON PLASMA THRUSTER FOR SPACE MISSIONS
- A07002: ATMOSPHERIC IMPACT OF LAUNCHERS

UPCOMING CONFERENCES AND EVENTS

- 2-3 July: *ESTEC, ACT Conference - 10 years ACT*
- 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*

Check out also ESA's conference portal:

<http://conferences.esa.int>

ACT PERSONNEL

We are still looking for interested candidates for the still open post doc vacancy on “**Innovation Dynamics and Computational Economics**” ([Description of the position](#))

We said good bye to Francesco Biscani, and Luis Felismino Simoes and welcome our new colleague Paul Gerke.

Current ACT team members are Camilla Pandolfi, Veronica Ramos, Daniel Alazard, Dejan Petkow, Duncan Barker, Guido de Croon, Lionel Jacques, Luke O'Connor, Paul Gerke, Sante Carloni, Dario Izzo and Leopold Summerer

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. The team also collaborates on studies with academic research centres through the Ariadna scheme.