

Short description written by each ESR and ER

Project acronym: **ELSA**
Project ID (6 digits): **033481**
Project Participant: **Department of Astronomy, University of Helsinki**

You			Your stay in the network				
NAME, first name	Nationality	Previous place of work/education	Start date	Duration (months)	Category ESR/ER	Place	Country
Oszkiewicz, Dagmara	Polish	Poznan Poland	1 Aug 2007	36	ESR	Helsinki	Finland

I finished my undergraduate studies in Poland in 2007, and obtained master degree in Astronomy. My master thesis titled 'Flower Satellite Constellations' was in the field of satellite dynamics. As an undergraduate student I had the opportunity to participate in the Socrates - Erasmus program. During my undergraduate studies I managed to travel through Europe and take part in international conferences, meetings, workshops and summer schools such as the VIRGO-SIGRAV School on Gravitational Waves, Cascina, Italy and the Space Summer School, Kiruna, Sweden.

Currently I am a PhD student at the Observatory of the University of Helsinki working in asteroid dynamics field. Of particular interest is the development of inverse methods for asteroid orbit computation. I have already made some progress towards this goal and the preliminary results of a new method were presented in the FinCOSPAR meeting, ACM conference, as well as during the ELSA meetings. At present I am also preparing to publication of the newly developed method. Finally, I plan to assess the implications of the research on the interpretation of Gaia observations of asteroids. In the Gaia network I am also associated with CU4 (Object processing) coordination unit, DU456 in particular. DU456 provides a source code for the orbital inversion package as a part of processing of the data that will arrive from the Gaia satellite. This connection to DPAC already allowed me to learn, observe and follow the development of this massive processing pipeline. I have also got involved in popular science activities and at present I am co-operating with the Finnish Fireball Network to develop and increase the performance of meteor observations in Finland.

As a part of the ELSA network I already had an opportunity to participate in many workshops, schools and training, such as: Summer School 2008: Multi-dimensional Data Analysis and Data Mining, ELSA School on the Science of Gaia, Database workshops, ELSA Workshop on Software Engineering and Numerics, Gaia JAVA Workshop and many others. My scientific horizons were also broadened by international conference attendance. The most important of which were: Asteroid, Comets, Meteors conference (USA), FinCOSPAR meeting (Finland), A national meeting of the Finnish ESO scientist and students (Finland). Multiple meetings within the network and the DPAC consortium have also led to plenty of opportunities to interact with scientist involved in other nodes and DPAC activities.

I am convince that the opportunities given by ELSA have and will continue to further inspire and add to my research.