Short description written by each ESR and ER

Project acronym: **ELSA**
Project ID (6 digits): **033481**
Project Participant: Name of Institute, University, Research Centre etc.

You			Your stay in the network				
NAME, first name	Nationality	Previous place of work/education	Start date	Duration (months)	Category ESR/ER	Place	Country
Santoro, Luca	Italy	Salerno, Italy	1 Nov 2008	23	ESR	O.C.A. Nice	France

Please provide a short description (half page – maximum one page) of your scientific background (including education and previous employer), of your responsibilities in the Network and of your experiences (positive and negative) to date. You may highlight the
most significant opportunities:

- training;
- interaction with other nodes and in particular with other early stage and experienced
researchers ("ESR", "ER");
- attendance to international conferences;
- research achievements.

*This short information should be sent to Coordinator either by e-mail (lennart@astro.lu.se) or by fax (+46 46 222 4614) **at least one month** **before the Mid-Term Review meeting**. Please bring also a copy at the meeting: the Commission's representative may collect it.*

My highest diploma is a Master degree in Physics, obtained at University of Salerno, Italy. The title of the Master thesis is 'Microlensing toward large Magellanic Cloud: confrontation of the experiments EROS and MACHO'. During one year I worked on statistics and events probabilities.

Since November 1st, 2008 I have joined ELSA programme for a joint PhD both at University of Padova and Observatoire de la Côte d'Azur. I will share my time collaborating with researchers from both hosts in France and in Italy. The title of my PhD is 'Tests of new physics in the code CESAM: application to Gaia'.

Currently hosted by OCA, I work on code CESAM for testing new input physics like diffusion and levitation of chemical elements in presence of rotation.

This activity is a contribution to CU8, within the Gaia Data Processing and Analysis Consortium.

In this context, I have been given the opportunity of sharing results with local ER as ESR. I participate to regular technical meetings where I will present my first results when relevant.

In January, I will attend the course on 'Numerical Analysis' given by Alain Noullez.

Other training classes should follow but are not yet scheduled.

At OCA, I also regularly attend weekly seminars on various scientific subjects that contribute to develop my knowledge in Astronomy.