



Position (PhD Thesis, Post-doc, invited researcher position,...) : **PhD**

Expected starting date period: Autumn 2007

Duration: 3 years

Deadline of this proposal: spring 2008

Title

3D micro fabrication for active optic

Summary of research/technical work :

The LAAS, in relation with two laboratories in Toulouse (LAPLACE and CIRIMAT), is engaged in studies of realization and characterization of optical systems in transmission for applications to active optics. This was supported by the realization of demonstrators using micro technologies.

Beyond the current passive systems introducing a static correction defined in the construction and by the choice of materials, the next evolution is to approach more complex passive systems and thereafter the active systems allowing a modification in-situ of the optical correction.

The components consist of a network of micro cavities between two transparent layers. The subject will consist in evaluating various technologies of implementation for components on several levels in relation to the other work undertaken within the same consortium. The integration of the material and new concept in design will be in the heart of the prospective development. The validation will be done by demonstrators profiting from the technological know-how acquired by LAAS in the realization of such components.

The work will define the best 3D fabrication processes in relation with specifications and impact on the desired optical correction.

Through this thesis, the successful candidate will be expected to obtain an expertise in the areas of nano-fabrication, optical engineering and electronic addressing

Required knowledge of candidate:

Good general knowledge on physics is mandatory

Location and other practical information:

At LAAS/CNRS in Toulouse (France)

All information on location, description of lab and other practical information available at <http://www.laas.fr>

Contact(s):

Dr. H. Camon

Address : LAAS/CNRS, MIS Group, 7 avenue du colonel Roche, 31077 Toulouse cedex4

Phone : +33 (0)5 61 33 64 67, Fax : +33 (0)5 61 33 62 08

E-mail : camon@laas.fr