



GOBIERNO
DE ESPAÑA

MINISTERIO
DE CIENCIA
E INNOVACIÓN



IFIC - INSTITUTO DE FÍSICA
CORPUSCULAR

INSTITUTO DE FÍSICA CORPUSCULAR – IFIC *PRE or POST DOCTORAL POSITION*

“Exploring and extending LHC beam intensity limits with collimation”

The LHC is extending the state-of-the-art in stored beam energy by almost three orders of magnitudes. Its intensity and performance is predicted to be limited by the achievable cleaning and control of unavoidable beam halo. Therefore, an upgrade program is foreseen during the first period of LHC operation. This program is supported by the European Organization for Nuclear Research (CERN) and the EU FP7 program EuCARD (European Coordination for Accelerator Research and Development).

In the framework of this project we are looking for a PhD student or a Post doc who would participate in simulations and beam measurements on beam halo, intensity reach, collimation efficiency and upgrades. The student will be employed by the Instituto de Física Corpuscular IFIC in Valencia, Spain. The student is expected to spend a significant part of his time at CERN to collaborate in the tasks of LHC beam measurements and simulations

IFIC is a High Energy Physics Institute where ongoing research activities include experimental and theoretical work with application in near-term and far-future projects, offering the possibility to work on a rich scientific environment at the forefront of a broad range of High Energy Physics studies. IFIC has also a number of groups working in the field of Medical Physics covering accelerator and detector developments and image reconstruction.

Applicants must have at least a degree in Physics or Engineering at the time of the recruitment and have to submit curriculum vitae including a statement of research interest. Applications should be sent, no later than middle of December 2009, to

Dr. A. Faus-Golfe
Instituto de Física Corpuscular IFIC
Ed. Institutos de Investigación de Paterna
Apto. 22085
E-46071 Valencia
Spain

For further information, please contact: Dr. A. Faus-Golfe (afaus@ific.uv.es) or Dr. R. Assmann (ralph.assmann@cern.ch)

More information about EuCARD and the LHC collimation upgrade project can be found at:

<http://www.cern.ch/lhc-collimation-project/>
<http://www.cern.ch/EuCARD/activities/research/WP8/>