

**CENTRO DE INVESTIGACIONES ENERGETICAS
MEDIOAMBIENTALES Y TECNOLOGICAS (CIEMAT)
SPAIN**

Grants for the Third Year (2007-2008)

FIRST CALL

Local Committee: **J. A. Rubio (Chair)**
 M. Cerrada
 N. Colino

Latin America to Europe

Grant	Type	Work Program	Months	Grant Holder Institution (Country)
1.	AT	<i>Double Chooz neutrino experiment.</i> Installation and commissioning of the far detector, participation in PMT and electronics testing in the lab, development of physics software analysis tools. Background: Ph.D. in experimental Particle Physics (or work in progress). Experience in software or hardware tools related to HEP experiments will be valued. <i>Tutor: Inés Gil Botella</i>	12	Not assigned
2.	AT	LHC Program: <i>Commissioning of the CMS Barrel Muon Detector; preparation for physics analysis in CMS.</i> <i>Background: Ph.D. work in progress, oriented to experimental Particle Physics and experience in software or hardware tools related to HEP experiments will be valued</i> <i>Tutor: Pedro Arce</i>	12	Edgar Linares CINVESTAV (Mexico)
3.	AT	<i>LHC Program:</i> preparation for data taking and physics analysis in <i>CMS.</i> Background: Ph. D. work in progress, oriented to experimental Particle Physics and experience in software or hardware (silicon) tools related to HEP experiments will be valued. Some parts of the work will be done in other Institutions in the Collaboration. <i>Tutor: Juan Pablo Fernandez</i>	12	Not assigned
4.	AT	<i>LHC Program:</i> analysis of the data to be	12	

		produced in the <i>ALICE</i> experiment. Background: physicist; with experience in experimental ultrarelativistic ion collision experiments and some experience on physics analysis and the use of the associated software. Previous experience in ALICE and availability to make short trips to CERN will be valued. Tutor: Pedro Ladrón de Guevara		Not assigned
5.	AT	Medical Physics: Super-computation. Development of computational codes based in Monte-Carlo techniques to design tomographic systems, to simulate conventional and hadronic treatments in radiotherapy; detection and study of physical processes in the field of medical physics. These codes run either in super-computational systems or GRID platforms. Background: Physicist, Computational Engineer or alike. Knowledge on C++ language, LINUX operative system and English are required. Tutor: Miguel Embid	12	Daniel Perez Astudillo CINVESTAV (Mexico)
6.	AT	Medical Physics: Radiological protection of patients. Measurements of the total dose given to a patient in a conventional or hadronic radiotherapy treatment. Development of protocols and dosimetric controls of the radiotherapy treatments with small beams used in radiosurgery and Intensity modulated radiotherapy treatment (IMRT). Background: Physicist with a working knowledge of English. Tutor: Miguel Embid	12	Maria del Sol Quintero BUAP (Mexico)
7.	AT	Grid Administration: Installation and configuration of new nodes; performance of applications running on the deployed grid infrastructure. Background: Previous knowledge and skills in Linux/ Unix administration is required. Tutor: Miguel Cárdenas	12	Mónica Manceñido UNLP (Argentina)