

Centre de Physique des Particules de Marseille Groupe imagerie X et gamma

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http://imXgam.in2p3.fr



Marie Curie ER Fellowship at CPPM, Marseille (France) FP7 ITN ENTERVISION Project

Position: ER fellowship within the Marie Curie ITN ENTERVISION Project

Duration: 2 years

Application deadline: Sept 30 2011 **Approximate contract start:** Feb 1st 2012

Project description:

The *imXgam* research group of the Centre for Particle Physics of Marseille (CPPM), France (http://imXgam.in2p3.fr) opens a 2-year Experienced Researcher (ER) fellowship within the European Marie Curie ITN ENTERVISION Project.

The *imXgam* team is a research group with a wide experience in particle physics instrumentation for biomedical imaging applications, involving detector development, Monte Carlo modeling and image reconstruction. The CPPM participates in several national and international projects for the development of novel imaging systems for ion therapy together with CERN, INFN and CNRS/IN2P3 among others. It has about *20* members, including Master and PhD students, as well as post-docs from different countries.

The activities of the group for this project include the development of high performance data acquisition based on µTCA, including programming of high end FPGA and interfacing it with detector prototypes.

The ENTERVISION Experienced Researcher (ER) will participate mainly in the development of a μ TCA Data Acquisition System specifically adapted to in-beam TOF-PET and prompt gamma detection, and for hodoscopes measuring the beam position. She/he will also participate in detector development, calibration and testing, Monte Carlo modeling and data analysis. Last but not least, he will attend training sessions at CERN, Lyon, Heidelberg and Valencia.

Profile and requirements:

Applicants must have a PhD with at least 5 years of experience or a M. Sc. in Electronics Engineering or similar with at least 4 years of experience. Other requirements include basic physics knowledge, experience in electronics instrumentation and/or design (FPGAs, VHDL), programming languages (C++, Python), board design, signal integrity, etc. A fluent English level and team working ability are essential.

In order to fulfill the eligibility criteria of the Marie Curie ITN, applicants must not have resided or carried out their main activity in France for more than 12 months for the 3 years immediately prior to their recruitment.

How to apply:

The foreseen starting date is Feb 1st 2012, or later on upon convenience.

To apply, please send a CV and an application letter with the subject ER ENTERVISION to:

Pr Christian Morel (morel@cppm.in2p3.fr)
Jean-Pierre Cachemiche (cachemi@cppm.in2p3.fr)



