PhD Call for Applicants in Experimental Nuclear Astrophysics (June, 2017)

A call for a PhD contract is open at IFIC (CSIC- University of Valencia) in the framework of the ERC funded consolidator project **HYMNS: High-sensitivitY Measurements of key stellar Nucleo-Synthesis reactions**. This project aims at the development and implementation of a novel detection technique for the measurement of stellar neutron capture rates relevant for the slow (s-) process of nucleosynthesis.

The post is based in the Gamma and Neutron Spectroscopy Group (http://webgamma.ific.uv.es/gamma/en/) at IFIC (http://ific.uv.es). The successful candidate will develop his PhD work in advanced instrumentation for γ-ray detection optimized for its application to the measurement of neutron capture cross sections at CERN n_TOF (Geneva). This experimental work comprises *i)* the development of advanced radiation detectors with γ-ray imaging capability, so-called i-TED, *ii)* first proof-of-concept measurements at CERN n_TOF and *iii)* involvement in the measurement of neutron capture rates of astrophysical interest for s-process nucleosynthesis in massive stars. Developments, data taking and analysis, physics and astrophysics interpretation will be undertaken as full PhD activities.

Post:	-Forefront research in experimental nuclear physics -6 months financed initial probationary period + 3 years contract
Requisites:	-Master degree (exceptionally good applications without Master degree may be considered to perform the Master work within the initial 6 months of the probationary period) -Availability to travel -Long stays abroad, mainly in Switzerland -Good level of English, oral and written
Skills:	-Physics studies (nuclear, electronics or theory) -Initiative -Good communication and team-work skills
Deadline:	-July 15th, 2017
Send: To: Subject:	-CV with two referee contacts -Academic record Dr. C. Domingo-Pardo domingo@ific.uv.es HYMNS PhD application [your family name]

Informal contacts are welcome (domingo@ific.uv.es).

Post available to start in autumn 2017