



NATIONAL CENTRE FOR PARTICLE, ASTROPARTICLE AND NUCLEAR PHYSICS

August 27, 2009

Personnel Contracts with CPAN partial financial support

The CPAN project of the CONSOLIDER-INGENIO 2010 program announces 2 contracts of personnel with partial financial support from CPAN. The proposed contracts are meant to provide technical support to the groups' research activities in a series of priority lines within the strategic actions of the CPAN Project. A detailed description of these contracts, 1 university graduate degree and 1 university intermediate degree, can be found in Annex I. The maximum duration of the CPAN financial support assigned to each appointment will be two years.

The groups participating in the CPAN Project will make an effort to give publicity to the present announcement in order to optimize the number and quality of the applications received.

1) Amount and nature of the financial support

The CPAN financial support for each of the contracts specified in Annex I will have the aim of co-financing the total contract cost, understood to be the sum of the net retribution plus the Social Security company fee. The beneficiary entities will hire the selected candidates in accordance with the current labour legislation.

For the position that requires an university graduate degree, the amount of the CPAN financial support will be 30.000 euro per year, and the minimum annual retribution they will receive, which must be indicated in the contract, is 27.000 euro (brut salary).

For the position that requires an intermediate university degree, the amount of the CPAN financial support will be 25.000 euro per year, and the minimum annual retribution they will receive, which must be indicated in the contract, is 22.000 euro (brut salary).

The remaining co-financing of the contract will be the responsibility of the beneficiary groups and organisms, who will assume the cost of retribution increments of the hired personnel in the following years, as well as the repercussions of any increases in the Social Security fee. The given financial support will be compatible with other aids or subsidies, as long as they do not jointly exceed the total cost of the contract.

The beneficiary entities are obliged to put at the appointee's disposition all the installations and material means needed for the normal development of their work, as well as to guarantee the same rights and benefits enjoyed by the entities' personnel of similar category.



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In case of interruption of the contract, the beneficiary entity and the appointed personnel are obliged to communicate such interruption to the CPAN Office within 15 natural days from the date of the interruption.

2) Candidate requisites

People whose contract is co-financed through this aid must have a graduate or intermediate university degree as required by the contract to which they apply. Candidates must be in possession of the required degrees by the date in which the application is presented.

3) Formalization and Application Process

Applications will be presented by the candidates through an internet application which can be accessed from the WEB page of the CPAN project: <http://www.i-cpan.es>. Applications must include:

- 1) The candidate's personal information.
- 2) The type of contract to which the candidate opts.
- 3) The candidate's Curriculum Vitae, including a scanned copy of the academic certification and university degree.

Applications must be presented from August 27, 2009 to September 9, 2009 (both inclusive).

The beneficiary group shall complete the application with a report about the optimal fitness of each candidate for the foreseen activities, assigning a tentative priority order to each candidate. These reports will also be processed through the internet application installed in the CPAN WEB page. The deadline for these reports is September 13, 2009.

4) Evaluation of applications

The evaluation of applications will be done by an Evaluation Commission named by CPAN's Executive Committee. The referred Commission will study and order the applications according to the following rules:

- 1) Compliance of the candidate to the development of the tasks to be performed, as function of the technical skills required.
- 2) CV of the candidate.

The resolution with the list of selected candidates will be published in CPAN's web page. The Evaluation Commission will propose, if needed, a list of supplants.

The proposed candidates must confirm in a period of 15 natural days their acceptance by means of e-mail which must be sent both to the receiving group as well as to the CPAN Office. If no notification is received within that period, the CPAN's Executive Committee will be entitled to select the following candidate in the list of supplants.



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5) Payment of the CPAN financial support and follow-up

In general, the assigned funding will start on the date in which the contract between the candidate and the corresponding organization starts, either after the publication of the resolution or before that, in this last case always having as limitation the date in which the period for presenting applications is open.

Payments will be done on an annual basis to the corresponding organizations. The payment procedures for the first year will start after the publication of the resolution as soon as the contract being financed is presented. The payment for the following year requires the previous presentation (and positive evaluation by CPAN's Executive Committee) of a scientific-technologic report resuming the activities performed, signed by the contracted person and the IP responsible for the corresponding CPAN's group.

Any publication or result related with the activities performed under this program must contain a reference to the CPAN financial support.

ANNEX I: Relation of Contracts

Reference: CPAN09-TS09

“Electronic Engineer/Physicist specialized in FPGA designs in the framework of sLHC”

CPAN beneficiary group:

Instituto de Física Corpuscular (IFIC), Valencia.

Candidate requirements:

Candidates must be Physicists or Electronic Engineers, with experience in the design, fabrication and tests of digital circuits based on last generation FPGAs. Traveling and long stays at CERN are expected.

Job Profile:

IFIC, where the main activities are expected to be carried out, 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 ATLAS group participates in the operation and commissioning of the Hadronic Tile Calorimeter (TileCal), where we have the main responsibility in the back-end electronics, trigger and data taking operation of the detector. Our group is also leading the R&D activities towards the sLHC TileCa trigger and calorimeter upgrade, including the new back-end electronics.

The main expected responsibilities of the candidate, who is expected to work under close supervision of IFIC TileCal researches and engineers, are:

- Digital Electronics. Microelectronics.
- PCB designs related to data acquisition.
- Knowledge of HEP data acquisition systems, related electronic design software, and electronic instrumentation.
- Knowledge of CAD tools for PCB designs, signal integrity analysis, etc.
- Hardware description languages to program logical circuits (FPGAs).
- Programming of Digital Signal Processing units (DSPs) with assembler and C languages.
- Knowledge of data transferring busses and protocols (VME, PCI, PCI Express, etc.).
- Programming languages C/C++/JAVA.
- Knowledge and experience with optical fiber data transferring at high rates.



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- Participation in the back-end electronics upgrade of TileCal.

Information and contact:

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Reference: CPAN09-TM05

"Developments for the iTOF y CALIFA spectrometers for R3B experiment of FAIR and the electronics of readout"

CPAN beneficiary group:

Instituto Galego de Física de Altas Enerxias (IGFAE), Santiago de Compostela

Candidate requirements:

Candidates must be technical Engineer or hold an intermediate degree or bachelor in Physics on opto-electronics or equivalent.

Job profile:

Within the frame of instrumentation developments for R3B experiment of FAIR done by GENP-USC the aim is to reach the maximum resolution possible in time in (iTOF) and in amplitude (CALIFA), going beyond present values. For that the hired technologist should develop new optoelectronic tecnicas to carture signals as well as innovation methods of digitalization and treatment of data.

The successful candidate should be incorporate in the already existing working teams and should be ready to make stay in collaborating groups in Sapin and abroad.

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