

November 22, 2010

PERSONNEL CONTRACTS WITH CPAN PARTIAL FINANCIAL SUPPORT

The CPAN project of the CONSOLIDER-INGENIO 2010 program announces 5 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, 4 university graduate degree and 1 university intermediate degree, can be found in Annex I. The maximum duration of the CPAN financial support assigned to the appointments will be limited by the ending date of the project (29th November 2012).

Please, notice that the contracts with references CPAN10-TS14 and CPAN10-TM04 will be granted only for one annuity.

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 positions that require a 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, and the minimum annual retribution he/she 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 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.

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 23 November, 2010 to 3 December, 2010 (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 10 December 2010.

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 could 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.

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 of the remaining monthly payments until the ending date of the project (29th November 2012) 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: CPAN10-TS11

“Participation in the design, construction and characterization of the integrated front-end electronics for PET systems based on SiPM detectors”

CPAN beneficiary group:

Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT), Madrid.

Candidate requirements:

Candidates must hold a degree in Engineering (Electronics or Telecommunications). Knowledge that will be valuable includes: design and simulation of integrated circuits, instrumentation programming (VHDL language), DAQ systems, technology transfer and professional experience in similar positions.

Job profile:

The candidate will take part in the process of adapting front-end ASIC (developed for the CTA project by the University of Barcelona-UB) for their use in new detectors for PET medical imaging with SiPM that are being developed at CIEMAT. After manufacturing a limited number of samples, he/she will perform their electric characterization. Once this phase is finished, the candidate will carry on functional tests of PET coincidences in a prototype using the developed electronics, in collaboration with the applied group at CIEMAT. These activities will be performed both at UB and CIEMAT.

Information and contact: Jesús Marín; jesus.marin@ciemat.es

Reference: CPAN10-TS12

“Computing Engineer or Physicist specialized in GRID, for his/her participation in the computing at the ATLAS experiment and its application to other branches of Nuclear and Particle Physics developed at IFIC”

CPAN beneficiary group:

Instituto de Física Corpuscular, IFIC, Valencia.

Candidate requirements:

Candidates must hold a Computing Engineering or Physics degree with experience in Grid Technologies and knowledge in the processing structure and data analysis of Atlas.

Job profile:

The candidate will work in the following tasks:

-Utilization and consolidation of the Distributed Analysis on the collected data (present and future) using tools such as PATHENA and GANGA.

-Support to end users (analysis physicists) of ATLAS in their analysis workflows, in particular, to the end of the analysis in the Tier-3. A particular aspect of interest is the Interactive Analysis using the PROOF farm or through their own User Interfaces.

-It is therefore necessary to incorporate a Physicist specialized in GRID Computing with proven experience in this field.

- Eventually, the candidate will also spend part of their working day (up to 20%) to the application of GRID technologies to different fields of Nuclear Physics of Particle, Astroparticle and Medical Physics, where the IFIC GRID and e-Science group is involved.

Information and contact: José Salt, Jose.Salt@ific.uv.es
Carmen Garcia, Carmen.Garcia@ific.uv.es

Reference: CPAN10-TS13

“Development of data acquisition and data transfer systems for instrumentation and future collider detectors in High Energy Physics”

CPAN beneficiary group:

Instituto de Física Corpuscular, IFIC, Valencia.

Candidate requirements:

The candidates must have a degree on Electronics or Telecommunication Engineering as well as experience in the design and fabrications of electronic boards and in the firmware development for FPGAs in the field of High Energy Physics.

Job profile:

The candidate will develop the different data acquisition systems required in the various experimental set-ups in which the group is involved (the design of the instrumentation for beam diagnosis and monitoring in a future linear collider and, also, in the design and construction of a vertex pixel detector in the next flavour factory at KEK in Japan).

The activities will cover areas which span from design and testing of the required electronic boards to the firmware development (VHDL or Verilog) for the FPGAs on the system, with particular emphasis on the data transfer from detector to personal computer using either USB or fast ethernet protocols.

He/She will test and calibrate the various electronic components which will make the final devices to be built. The work will consist in the testing of the different data acquisition electronic systems, help in the design of the experimental set-ups, check that they follow the required specifications on electromagnetic radiation emission, etc.

Information and contact: Carlos Lacasta Llácer, Carlos.Lacasta@ific.uv.es
Carmen Garcia, Carmen.Garcia@ific.uv.es

Reference: CPAN10-TS14

“Engineer or Physicist specialized in Grid computing in the frame of Astroparticle Physics”.

CPAN beneficiary group:

Universidad de Alcalá de Henares.

Candidate requirements:

The candidates must hold a degree in Engineering, Physics or similar with proven experience in Grid computing environments and knowledge in glite middleware.

Job profile:

Establishment, commissioning and maintenance of a GRID VO for the SPAS Group (Space and Astroparticle) of the Universidad de Alcalá in order to perform Monte Carlos simulations for the Pierre Auger Observatory project where the group participate.

The main tasks will be:

- Study of the computing needs.
- Needed infrastructure.
- Speed of connexion.
- Quantity of CPUs.
- Storage capacity.
- Evaluation of costs and location of the equipment.
- Training in GRID technology (CERN, UNAM, PRAGA).
- Acquisition of equipments and commissioning of the system.
- Commissioning of the VO for the Alcalá University.
- Implementation of the software to be used in the Pierre Auger project:
- Offline DPA
- CORSIKA
- Aires
- Geant 4

This contract will have a duration of one year.

Information and contact: Luis del Peral, luis.delperal@uah.es.

Reference: CPAN10-TM04

“Characterization of forefront scintillators for the CALIFA spectrometer of R3B (FAIR) and the readout electronics”

CPAN Group:

Instituto de Estructura de la Materia, IEM. Madrid

Candidate requirements:

Minimum academic level: bachelor in electronics engineering, or bachelor in telecommunication engineering, in the branch of electronics, or any other equivalent degree. Good knowledge in English is appreciated.

Job profile:

The successful candidate will be in charge of the mechanical mounting of the test bench and the test of the scintillators coupled to different systems of light collection. He/she will design the test bench, participate in the test done at the laboratory of IEM with standard radioactive sources and in the tandetron of 5 MV at CMAM to deduce the response of the scintillator to charged particles. He/she will be in charge of adapting the existing multiplexed data readout system for Si detectors to the readout of the photomultiplier tubes and large area photo diodes, specifically to develop a voltage and temperature control system.

This contract will have a duration of one year.

Information and contact: Maria José García Borge, borge@iem.cfmac.csic.es
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