

Centre de Physique des Particules de Marseille 163, Avenue de Luminy – case 902 – 13288 Marseille Cedex 9 France Téléphone: (+33) 04 91 82 72 00 https://www.cppm.in2p3.fr



Junior Faculty Position (Assistant Professorship / "Maître de Conférence") in CPPM Marseille France

The Aix-Marseille University and the ATLAS CPPM group in Marseille have an opening for a "Maître de Conférence" Position in the domain of ATLAS/LHC Data Analysis – Digital technologies and systems – Rapid acquisition and analysis of big data in an interdisciplinary approach – Fast readout electronics.

The applicant that will be recruited will take part in the computing science teaching linked to the Polytech Microelectronics and Telecommunications cursus as well as in Numerical Systems. He/she will put in place new lectures related to the data collect and data treatment as well as various pedagogical projects connected to these orientations.

The candidate will take a leading role in the CPPM ATLAS activities, in particular in the domain of big data treatment and analysis. He/she will be involved in the ATLAS Liquid Argon Calorimeter upgrade as well as in the LHC physics data analysis. He/she will work closely with the engineers in charge of the design of the electronics boards to adapt and implement Artificial Intelligence (IA) algorithms (Neural Network) on FPGAs for efficient reconstruction of the energy deposited in the Calorimeter as well as to explore improved triggering capabilities with an embedded AI approach. He/she should also have in depth knowledge of big data analysis and will participate to the physics analysis taking place in the group, in particular in the domain of Higgs physics and of searches for Beyond Standard Model Physics.

The candidate is also expected to participate to scientific and technological watch for future projects of the domain (e.g. Future Circular Collider, ...), but also linked to an interdisciplinary approach linked to big data on the fly fast treatment and compactification in various application domains.

A first step is to have "qualification" (<u>https://www.galaxie.enseignementsup-recherche.gouv.fr/ensup/cand_FAQ_qualification.htm#11</u>) for applying to these positions. As the position includes teaching activities, being able to speak French is clearly an asset. Further information and application procedure can be found on: <u>https://galaxie.enseignementsup-recherche.gouv.fr/antares/can/astree/index.jsp</u> https://www.galaxie.enseignementsup-recherche.gouv.fr/ensup/ListesPostesPublies/ANTEE/2022_1/0134009M/FOPC_0134009M_1072.pdf

Further inquiries can be addressed to: <u>barbero@cppm.in2p3.fr</u>

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