



Centre d'Etudes Nucléaires de Bordeaux-Gradignan

Gradignan, France,  
March 18th, 2019,

## 24-month Full Time Contract Scientist

The Centre d'Etudes Nucléaires de Bordeaux-Gradignan (<http://www.cenbg.in2p3.fr>), a public research laboratory funded by the National Center for Scientific Research (CNRS - <http://www.cnrs.fr/en>) and its National Institute of Nuclear and Particle Physics (IN2P3 - <https://in2p3.cnrs.fr>), and by Bordeaux University (<https://www.u-bordeaux.com>), is proposing a 24-month full time contract for a scientist. The laboratory is located in Gradignan, France, near Bordeaux.

The candidate will join the iRiBio team (<http://www.cenbg.in2p3.fr/-IriBIO->). He/she will contribute to the development and validation of the very low energy **Geant4-DNA** extension (<http://geant4-dna.org>) of the general purpose and open access Geant4 Monte Carlo simulation toolkit (<http://geant4.org>, <http://geant4.in2p3.fr>).

In particular, he / she will contribute to the following topics, currently under development within the Geant4-DNA Collaboration:

- extension of track structure simulation capabilities in biological medium,
- improvement of water radiolysis simulation,
- development of multi-scale geometries of biological interest for the prediction of damage,
- inclusion of biological repair models,
- development of Geant4-DNA-based applications related to radiobiology and medical physics,
- irradiation of biological samples on the CENBG cellular irradiation microbeam line.

The candidate is expected to have strong experience with the simulation of particle-matter interactions (ideally with Geant4) and with C++ coding. He / she will collaborate with physicists, chemists and biologists in an international environment (in particular Geant4 and Geant4-DNA Collaborations). Candidates must have defended their PhD within 3 years at the start of this contract.

If interested, please send your CV, motivation letter and two support letters to [incerti@cenbg.in2p3.fr](mailto:incerti@cenbg.in2p3.fr) before **June 30th, 2019**. Candidates will be interviewed.

The position will start from **September 1st, 2019**.

For further information please contact Sebastien Incerti ([incerti@cenbg.in2p3.fr](mailto:incerti@cenbg.in2p3.fr), phone: +33 5 57 12 08 89).

Sebastien Incerti  
Spokesperson of the Geant4-DNA Collaboration

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