

POSTDOCTORAL POSITION in MEDICAL PHYSICS M/F – CDD à 100 %

Medical Physics Department – Nantes – Saint-Herblain

Recrutement n°xxx

Date : 15/09/2020

POSITION

An 18-month postdoctoral position is available in the Medical Physics Department at the Institut de Cancérologie de l'Ouest, Nantes-Saint-Herblain, France. We are looking for highly motivated candidates with an interest in dosimetry, simulation and particle therapy. Applicants should have a doctoral degree in nuclear physics or medical physics. Expertise in particle therapy and GATE simulation is preferred. An experience in engineering would be appreciated. The successful applicant will be fully involved in our FLASHMOD project in collaboration with ARRONAX cyclotron.

Among the recent developments in the field of preclinical radiotherapy, the remarkable sparing of normal tissue obtained after irradiation at very high dose rate (VHDR), the so-called FLASH effect, is really exciting. Further radiobiological experiments are required to better understand the mechanisms involved in this effect. From a radiation oncology point of view, the combination of a proton beam and the FLASH effect could be of great interest for treating childhood cancer. However, from medical, nuclear and instrumentation physics points of view, several challenges must be met to be able to investigate this effect, especially the control of the beam, from the production to the delivery. The goal of the FLASHMOD project is to develop an end-to-end dosimetric environment for a proton beam in VHDR conditions at ARRONAX facility.

APPLICATION

Qualified candidates can apply by sending their CV and a short statement of research interests to Grégory Delpon, head of Medical Physics Department: gregory.delpon@ico.unicancer.fr, before **15-Oct-2020**. The planned start date is **1-Dec-2020**.