

Postdoctoral position in optical communication

High bit rate PAM signals generation and detection

In the context of increasing optical access network and datacom capacity, Pulse Amplitude Modulation format offering higher spectral efficiency than standard NRZ format is deeply studied as a solution beyond 10 Gb/s. The Photonic Systems team of Institut Foton opens a 12 months postdoctoral position in order to study the experimental chain for PAM generation and detection. The position covers the test of new opto-electronic and electrical devices carried on within two running programs: encoder/decoder for 56 GBaud PAM4 (industrial program) and directly modulated VCSEL (research program).

Qualifications

- PhD degree in photonics
- Skills in the measurement of optical devices and optical transmission systems
- Knowledge in optics, opto-electronic, electronic, communication systems and network
- Abilities to work in a collaborative environment
- Good communication skills
- Good knowledge of written and spoken English

About the Foton institute

Center of photonics for information technology, Institut Foton is a joint laboratory of CNRS, University of Rennes and INSA Rennes. Foton is located over two sites with about 120 employees. It is one of the first public research forces in France in its field. The research topics, which were primarily concerned with optical communications, are now covering applications as distinct as defense, life sciences, industry, or energy (<http://foton.cnrs.fr>).

The postdoctoral research associate will work within the optical communication group and the Persyst platform (<http://persyst.foton.cnrs.fr>) which have an established reputation in the demonstration of system functionalities (such as those employed in optical transmissions, from advanced optical modulations to silicon photonic transmitters).

Application

The project will start as soon as possible at Institut Foton, in the Photonic Systems team, located at Enssat, 6 rue de Kerampont, Lannion. The position will be filled as soon as a suitable candidate has been identified. Please send your CV (including details of 2 references), cover letter, and submit your application by email to mathilde.gay@enssat.fr.