

## Job offer

### ERC Consolidator Grant InnoSpace

#### ***“Revolutionizing fiber-wireless communications through space-division multiplexed photonics”***

The ITEAM Research Institute (Universitat Politècnica de València, Spain) offers **1 Postdoctoral position** to a well-qualified, highly motivated and dynamic scientist/engineer, with a Doctorate in **Photonics** and background on optical fiber communications. The successful candidate will be associated to the **Photonics Research Labs**, led by Prof. José Capmany.

The contract is offered for up to 4 and years within the framework of the European **ERC Consolidator Grant** InnoSpace granted to Ivana Gasulla under the title “Revolutionizing fiber-wireless communications through space-division multiplexed photonics”. The idea of the project InnoSpace is to develop what we call “distributed signal processing”, where simultaneously to radiofrequency distribution, the same optical fiber will implement a variety of broadband functionalities that will be especially demanded in future 5G smart radiating systems. This approach requires working on a new portfolio of advanced optical fibers exploiting space-division multiplexing techniques, including both multicore fibers and few-mode fibers.

The work of the candidate, together with the rest of the research team, will imply, in first place, to work on new design algorithms and theoretical analysis using specific numerical software and Matlab. Then, he/she will contribute to the fabrication, monitoring and characterization of the proposed optical fibers and devices, including their final application to a set of representative Microwave Photonics applications that are required in fiber-wireless communications. Besides, he/she will contribute to the process of producing technical reports of the project and to the active searching of new funding opportunities.

#### **Benefits**

The contract is offered for a total of up to 4 years after a test period of 4 months. The contract may be renewable after the 4 years with the funds from other projects/grants.

- Estimated starting date: 01/05/2018

#### **Skills/Qualifications**

The candidate should have a Telecommunications/Electrical Engineering Degree (or Physicist) with a Doctorate in Photonics and deep background on optical fiber communications (especially preferred in the field of space-division multiplexing). He/she must hold a good track record of scientific publications and experience in international research projects.

For further information about the position, please contact **Dr. Ivana Gasulla** by email: [ivgames@iteam.upv.es](mailto:ivgames@iteam.upv.es).