

Campagne d'emplois Enseignants- Chercheurs 2017

Corps : Article : Chaire : Section n° 1 : Section n° 2 : Profil synthétique:	PR <u>NON</u> 28 30 Nonequilibrium systems, theory and modeling
Composante, service ou département	FST
Unité de recherche:	UMR5306, ILM

TEACHING:

The Physics Department of Claude Bernard Lyon 1 (UCBL) University offers rich and diverse training opportunities in physical and professions associated related to it. It leads an ambitious policy of success for its students, including a strong link with the socioeconomic world and academic partners, and also a well-marked openness to international (double degrees with the University of Wuhan/China and the Politecnico di Milano/Italy).

The recruited professor will be involved in these actions. He/She will help to reinforce connections between the three levels Bachelor – Master - PhD, in particular he will help in facilitating links between students and strengthening the interaction with Lyon or external research partners.

He/She will be strongly involved in the international policy of the Department, in particular he/she will seek new partners and work on the possibilities for students to benefit from individual program with internships or stays abroad. The professor will participate at all levels of training, from bachelor to master, in Physics, in Science and Engineering (for example, in the Master Nanoscale engineering with the academic partners INSA and Ecole Centrale de Lyon, and in the Master "Science de la Matière" with the partner Ecole Normale Supérieure de Lyon). He could be in charge of teachings of physics of nonequilibrium systems.

Contact:

Jean-Claude Plenet, directeur du département de Physique, jean-claude.plenet@univ-lyon1.fr, 04 72 43 11 96

RESEARCH:

The Institute of Light and Matter (iLM) is a joint research unit of University Claude Bernard Lyon 1 (UCBL) and Scientific Research National Centre (CNRS) in the fields of physics and physical chemistry. It hosts 300 persons and is located at LyonTech-la Doua campus at the heart of the Lyon Metropole and the Auvergne Rhône-Alpes region. The institute covers a broad spectrum of expertise, particularly in molecular and material sciences, nanomaterials, optics, soft matter ...

The recruited professor will join one iLM's team in which he/she is expected to develop research works in theory and modeling in one of the following topics:

- Light-matter interaction in nanosystems (metals, semiconductors, dielectrics and hybrids). These systems can combine electromagnetic effects associated with nanostructures and quantum interaction mechanisms with one or more transmitters, and nonequilibrium dynamic processes related to vibrational or electronic confinement
- Nonequilibrium complex systems – including active systems – organic or synthetic, nanofluidic and nanothermic transport, dynamics of complex fluids and heterogenous materials, collective behaviors and instabilities.

The recruited professor will have to provide a high level and original research proposal in strong interaction with the experimental activities of iLM, in order to develop a close relationship between theory and experiment.

Contact :

Philippe Dugourd, directeur de l'Institut Lumière Matière, dir.ilm@univ-lyon1.fr, +33 4 72 44 84 54