

JOB DETAILS

- Assistant Professor (“Maître de Conférences”) in CNU Section 28 (Condensed matter and Materials)
- Job title: **Advanced methods for electronic correlation: static/dynamical properties of materials and phase transitions from first principles**
- Job description: We seek a candidate expert in advanced methods for electronic correlation, such as the Dynamical Mean Field Theory (DMFT). The recruited assistant professor will study materials properties such as magnetism, superconductivity and phase transitions, as well as photoemission, optical, and X-ray spectroscopies. She/he will aim at combining DMFT with other methods used in the team, such as Quantum Monte Carlo and Many-Body Perturbation Theory. She/he will have teaching duties at the undergraduate level.

LOCATION

- Physics department (UFR de Physique), Faculté des Sciences et Ingénierie de Sorbonne Université, 4 Place Jussieu, 75252 Paris, Cedex 05

HOST INSTITUTION

- IMPMC (Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie)– UMR 7590 CNRS – Sorbonne Université – MNHN – IRD

SPECIFIC DUTIES AND RESPONSIBILITIES

- Teach Physics at the Bachelor (“Licence”) and Master levels;
- Provide high-quality supervision of students;
- Contribute to the development and organization of courses in Condensed Matter Physics for the SMNO (“Sciences des Matériaux et Nano-Objets”) Master program;
- Carry out world-class research in many-body theories from first principles in the domain of condensed matter and solid state physics;
- Contribute to the development of the dynamical mean field theory, by combining it with quantum Monte Carlo and many-body perturbation theory;
- Study emergent states of matter such as magnetism, superconductivity, and phase transitions of materials relevant for fundamental properties and/or technological applications;
- Pursue scientific collaborations within the Quantum Theory of Materials (TQM) Group, and across the other teams working in the IMPMC and in the stimulating scientific environment offered by the Pierre and Marie Curie campus of the Sorbonne University, and by the Parisian area;
- Knowledge of French is requested.

APPLICATION PROCEDURES AND DEADLINES

This position has been published on both the GALAXIE website (https://www.galaxie.enseignementsup-recherche.gouv.fr/ensup/ListesPostesPublies/Emplois_publices_TrieParCorps.html) and Sorbonne University webpage (<http://www.recrutement.sorbonne-universite.fr/fr/personnels-enseignants-chercheurs-enseignants-chercheurs/enseignants-chercheurs/recrutement-2019-enseignants-chercheurs/postes-ouverts-par-la-faculte-des-sciences-et-ingenierie.html>). In order to apply, strictly follow the instructions therein (GALAXIE reference number 116).

Deadline for the application is **February 25th 2019 at 4pm ECT**.

For further information regarding the application procedures, you may contact:

G. Fiquet (IMPMC director) (guillaume.fiquet@sorbonne-universite.fr);
M. Casula (head of the TQM group) (michele.casula@upmc.fr).

USEFUL LINKS

<http://www.imPMC.upmc.fr/fr/index.html>

http://www.imPMC.upmc.fr/fr/equipes/theorie_quantique_des_materiaux.html