The general goal of this project is the theoretical study of several fundamental aspects of nanoscale thermal transport. In particular, we want to improve our current understanding of the radiative heat transfer and thermal radiation in nanoscale systems. We also want to elucidate the fundamental physical mechanisms that govern the heat conduction in atomic-scale junctions. Additionally, we intend to study the energy dissipation and, in particular, the thermoelectric cooling in molecular junctions. All these issues are of fundamental importance for many different fields and disciplines such as thermal sciences, nanoelectronics, nano-optics, and condensed matter physics. Moreover, these problems are key to developing novel technologies like near-field based thermal management, thermophotovoltaiccs, and nanoscale energy conversion.
HPC Systems Administrator at CCC-UAM

Two HPC Systems Administrator positions available within YEI program from “Comunidad de Madrid”. For more information please visit CCC-UAM website.

IFIMAC's Master Grants for 2017-2018 – Closed
Condensed Matter Physics Center – IFIMAC through “Acreditación de Excelencia María de Maeztu” programme provides up to 4 Master Grants for candidates who wish to obtain an official master degree at Universidad Autónoma de Madrid related to IFIMAC. The call for proposal will be open from September 8th to September 22nd, 2017.
Deadline: September 22nd, 2017 at 15.00 h.
For more information please visit IFIMAC’s website.

Postdoctoral Position Available at IFIMAC and FTMC on Classical and Quantum Electrodynamics of light-matter Coupling – Closed

Project Title: Classical and Quantum Electrodynamics of light-matter coupling (FIS2015-64951-R).
Funding Agency: Programa Estatal de I+D+i Orientada a los Retos de la Sociedad (MINECO).
PIs: A. I. Fernandez-Dominguez, Fabrice Laussy & Elena del Valle.

A 2-year postdoctoral position is open to work on the project Classical and Quantum Electrodynamics of light-matter coupling – CLAQUE, funded by the Spanish MINECO under the Programa Estatal de I+D+i Orientada a los Retos de la Sociedad. CLAQUE is a collaborative theoretical project designed by a team of young, leading scientists which aims to address open, fundamental and technologically-oriented problems involving classical and quantum aspects of light and light-matter interactions. CLAQUE brings together complementary areas of expertise to address currently open problems in nano- and quantum-optics. It aims at setting on foot exploratory strategies with potential ground-breaking implications, and opening new fronts of research by
merging different approaches to closely related problems. The project focuses on novel phenomena emerging from the tuning and optimization of quantum correlations [1] in exciton-plasmon, and other hybrid light confining, platforms [2].

In the context of this research project, the postdoctoral researcher will work on the design and exploration of tailored nonclassical light sources through the spectral and spatial distillation of quantum correlations at the nanoscale.

For further information and to apply, please contact Elena del Valle at elena.delvalle@uam.es. Applications should include a cover letter, CV, and contact information for two references. Initial appointments will be for one year, with possible extension to the second year. Applications will be received until April 15 2017.

Official announcement.

References
A 4-year PhD studentship funded by the EU-FP7 Marie Curie Career Integration Grants scheme is available. The research work will focused on the theoretical description of surface-plasmon-assisted phenomena at the nano- and subnano-metric scales. The ultimate objective of the project is to devise theoretical tools able to describe the optical properties of macroscopic-sized systems where the quantum character of light and matter cannot be neglected.

Project Information
Funding agency: EU FP7 Marie Curie Career Integration Grants Scheme
Project acronym: MESOPLAS
Principal investigator: Antonio I. Fernández Domínguez
Deadline: May 1st, 2015
Contact: Interested applicants must contact by e-mail directly A. I. Fernández-Domínguez at a.fernandez-dominguez(at)uam.es