

11 PhD positions MSCA Doctoral Network - TIMES

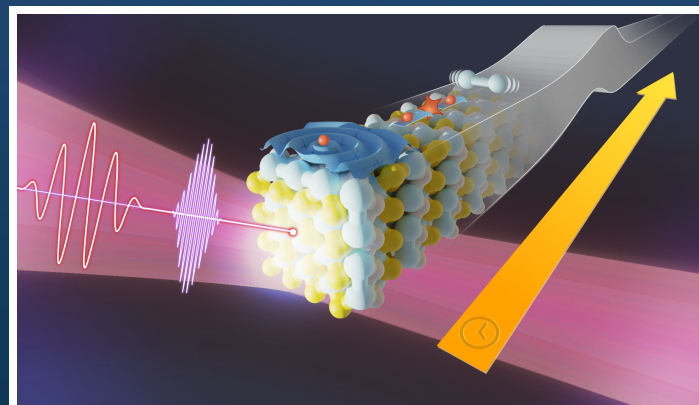
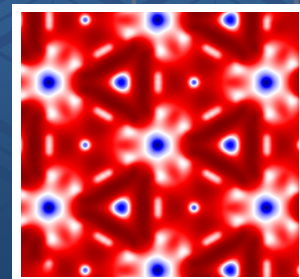
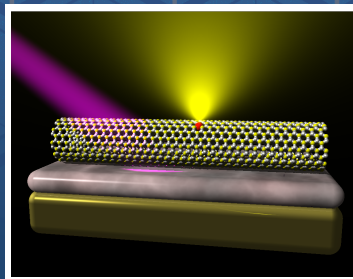


For the Marie Skłodowska-Curie Actions Doctoral Network "Time-resolved sImulations of ultrafast phenoMena in quantum matErialS (TIMES)" (see <https://times.uv.es>) we have **11 open PhD positions** in different aspects of computational and theoretical physics with an intended starting date between **June and November 2024**.

The **objective** of the doctoral network is the modelling of emergent phenomena arising from excitation, correlation, and coherence of electrons, spin, photons and nuclear motion. TIMES merges different areas of expertise in many-body physics, time-dependent electronic structure methods, and machine learning to reach a new paradigm of the atomistic modelling of nonequilibrium processes in condensed matter.

TIMES will train a new generation of scientists capable of devising novel theoretical and computational frameworks to simulate nonequilibrium phenomena. TIMES will synergize theoretical and numerical developments with High Performance Computer Centers, SMEs, and big-data facilities across Europe. The network activities will benefit from synergistic collaborations with leading experimental groups in ultrafast spectroscopy.

The 11 PhD projects cover several topics in the domain of time dependent simulations like exciton-ion dynamics, nonlinear response, decoherence phenomena, spin-waves, and light-induced structural phase transitions, among others.



Competitive salary

The brute salary of the doctoral network ranges between 2000-3000€ depending on the family situation and the country of the beneficiary.

Research Stays

All the PhD positions include funded research stays in the network nodes of beneficiaries and associated partners. Among the partner's network we count with Simune, IMEC, CINECA, MAX.

Become an independent researcher!

The training is planned to form independent researchers. PhD candidates will be engaged in the organization of the training activities and will have a constructive role in the scientific activities of the network!

Training plan

The network has an innovative training plan in computational physics and chemistry, high-performance computing and quantum materials. The network has planned workshops, schools, code hackathons, and conferences in leading European Universities and Research Centers, together with collaborations with experimental researchers.

Requirements

1. Candidates must have completed the Master studies at the time of incorporation and must comply with the eligibility criteria of the MSCA Doctoral Networks (check eligibility criteria in the website <https://marie-skłodowska-curie-actions.ec.europa.eu/actions/doctoral-networks> and on the site of MSCA program).
2. Background in one of the following areas: solid-state physics, computational chemistry, computational materials science and similar areas of research.
3. Experience in programming, high-performance computing, ab initio methods and machine learning methods is desirable.

Applications:

<https://times.uv.es/open-positions>

Interested candidates must submit a curriculum vitae (2 pages max.), indicating two references, a short research statement (1 page maximum), and the transcripts of academic records.

Applications should be uploaded as a single PDF file through the web form, indicating the preferred supervisor/PhD project (up to 3 options in order of preference) and the time window in which you are available to start.

TIMES



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