

Promotional video: Theoretical Condensed Matter Physics (UAM)



In the Department of Theoretical Condensed Matter Physics at the Universidad Autónoma de Madrid, we focus on understanding and predicting the behaviour of condensed systems, which are ubiquitous in the world around us.

We are interested in problems in areas such as nanotechnology, biophysics, nanophotonics or material science. We employ a wide range of theoretical approaches to gain insight into diverse physical systems, from living matter to the atom itself. We work in optics, quantum mechanics, biophysics, fluid dynamics or material physics. We carry out creative research, which requires imagination and creativity. We work with fundamental equations, we study them, analyse them in different contexts, we take them to places they have never been and return with new and surprising information. Our findings reveal how simple rules can give rise to complex phenomena, which is helping us to understand and develop new material platforms for the implementation of the technology of the future.

Fundamentally, this is research with which we need your help.

Long version.

Short version.