Axion Dark Matter and the Quality Problem

Speaker: Giacomo Landini, postdoctoral researcher, Instituto de Física Corpuscular (IFIC)

Abstract: The Peccei-Quinn mechanism is regarded as the most compelling solution to the Strong CP Problem of the Standard Model. It relies on a new global U(1) symmetry that is spontaneously broken, giving rise to an ultra-light scalar field known as the axion. Notably, the axion is also an excellent Dark Matter candidate, addressing two open problems of the Standard Model. In this talk, I will review the theoretical foundations of axion model-building, with a particular focus on the axion quality problem and the various solutions proposed in the literature.

Jueves 14 de noviembre, 12 horas, seminario de Física Nuclear

On-line

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