GSI - Colloquium

Main Lecture Hall (SB1 1.120), 64291 Darmstadt, Planckstraße 1

Tuesday, 27 October, 2015, 16:15 Uhr (Tee ab 15:45)

Pre-colloquium for students at 15:30

Guy Moore TU Darmstadt

Symmetries, Dark Matter, and the Axion

Generally, Quantum Chromodynamics, the theory of the strong interactions, should violate both parity and time reversal symmetry. It turns out that the violation is extremely small, consistent with zero. PQ symmetry is a proposal which would make this symmetry automatic. It predicts a new particle, the Axion, which could be the Dark Matter in the Universe. I explore how well we can relate the Axion's role as the dark matter to its mass and other measurable properties. This requires a discussion of the Axion's dynamics in the early Universe.

Einladende/r: Bengt Friman

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