

Phenomenological and Gravitational Properties of a Monopole-Domain Wall System

Wednesday, 4 March 2026 14:40 (20 minutes)

We consider an exotic object that may be attained in cosmology models permitting the existence of two interacting defects: the magnetical monopole and an axion domain wall. The system is subject to the Witten effect, which gives rise to unique electromagnetic properties. A stable, gravitating solution of the system is formulated; we discuss its relations to the study of other compact objects, and the physical consequences of stable remnants from early universe dynamics.

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Session Classification: Session II