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INTERNAL SUPERSYMMETRY AND ITS GOLDSTINI

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Abstract

We provide a pedagogical introduction to spontaneous symmetry breaking in the case of space-time symmetries. We highlight the universal dynamics of the corresponding Goldstone modes and the relation to the soft limit of their scattering amplitudes. Particular focus is placed on the case of a scalar field and of a fermion field, arising from the spontaneous breaking of e.g. Poincare and supersymmetry. This includes the DBI, Galileons and Volkov-Akulov theory. Finally, we discuss the supersymmetric combination of this scalar and fermion field.

Date : Tuesday, January 23, 2018

Time: 14:00

Place: IMBM Seminar Room, Boğaziçi University South Campus