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Color Unified Dynamical Axion

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In this talk I present a model with an enlarged color sector which solves the strong CP problem via new massless fermions. QCD color is unified with another non-Abelian group with a large confinement scale. The spontaneous breaking of the unified color group provides a source of naturally large axion mass due to small size instantons, and as a result no very light axions are present in the low-energy spectrum. The axion scale may be not far from the TeV region which translates to observable signals at colliders. This model naturally enlarges the parameter space for axions which solve the strong CP problem well beyond that of invisible axion models.

Parallel Session

Alternatives to Supersymmetry

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