

Tuesday, November 22 @ 4:00 PM

Physics & Astronomy Building (PAB) 4-330

Constraining effective actions via scattering amplitudes

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I will discuss how the consistent conditions arising from scattering amplitudes can be utilized for constraining low-energy effective actions. In particular in this talk I will focus on the effective action of $N=4$ super Yang-Mills theory on the Coulomb branch. The constraints from supersymmetry as well as (broken) conformal symmetry allow us to obtain new non-renormalization theorems. I will also discuss scale invariance v.s. conformal symmetry in this context.