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## Constraining effective actions via scattering amplitudes

*Friday 2 September 2016 17:30 (30 minutes)*

The requirement of having a consistent S-matrix can impose highly non-trivial constraints on effective field theories. In particular, we show how supersymmetry constrains the effective action of N=4 SYM in the Coulomb branch and we introduce new constraints coming from breaking conformal symmetry in the form of soft theorems. Finally, we also discuss the interplay between scale and conformal invariance in the context of scattering amplitudes.

### Summary

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