



Contribution ID: 389

Type: **not specified**

## Constraining effective actions via scattering amplitudes

*Friday, September 2, 2016 5:30 PM (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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**Session Classification:** Section G

**Track Classification:** Section G: Strongly Coupled Theories