



Contribution ID: 14

Type: not specified

## Mitter – Yang-Mills correlation functions from the functional renormalization group

*Tuesday 23 February 2016 17:25 (20 minutes)*

We investigate SU(3)-Yang-Mills theory in a systematic vertex expansion scheme for the effective action. Particular focus is put on the dynamical creation of the gluon mass gap at non-perturbative momenta and the consistent treatment of quadratic divergences. The gluon and ghost propagators as well as the momentum-dependent ghost-gluon, three-gluon and four-gluon vertices are calculated self-consistently and the apparent convergence of the expansion scheme is discussed by comparing to corresponding lattice QCD results.

**Presenter:** Dr MITTER, Mario (University of Heidelberg)

**Session Classification:** Contributed talks