

# Quark mass generation with Schwinger-Dyson equations

*Thursday, 22 March 2018 10:10 (20 minutes)*

In this talk, I will present some the current efforts to understand the phenomenon of chiral symmetry breaking and the generation of a dynamical quark mass. To do that, we will use the framework of the Schwinger-Dyson equations. We will solve the coupled system of integral equations formed by the quark propagator and the complete non-transverse structure of the quark-gluon vertex, which is formed by four independent form factors. Particular attention is dedicated to guarantee the correct renormalization group behaviour of the quark dynamical mass and in the extraction of the phenomenological parameters such as pion constant decay.

## Summary

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