



Contribution ID: 206

Type: **Oral Presentation**

## One flavour adjoint QCD with overlap fermions

*Wednesday 10 August 2022 15:40 (20 minutes)*

The infrared effective theory of adjoint QCD with one Dirac flavour is still under debate. The theory could be confining, conformal, or fermionic fields could become the lightest fields in the IR. Chiral symmetry seems to be important to answer this question. Previous investigations have considered Wilson fermions breaking chiral symmetry. We present here the first results for this theory based on overlap fermions. These indicate a chiral symmetry breaking and formation of a fermion condensate. We have also investigated the running coupling of the theory, which indicates no IR conformality in the energy region we have explored.

**Authors:** BERGNER, Georg (University of Jena); SOLER, Ivan (University of Jena); Dr PIEMONTE, Stefano (UR)

**Presenter:** BERGNER, Georg (University of Jena)

**Session Classification:** Particle physics beyond the Standard Model

**Track Classification:** Particle physics beyond the Standard Model