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## Determination of $\alpha_s$ in $N_f = 3$ QCD from current-current correlation functions in position space

*Thursday, 6 August 2020 14:20 (20 minutes)* 

In this talk, we present a lattice determination of the coupling constant  $\alpha_s$  in  $N_f = 3$  QCD for renormalization scales  $\mu \in (1, 2)$  GeV.

The computation has been performed on ensembles generated by the Coordinated Lattice Simulations (CLS) consortium, with tree-level Symanzik-improved gauge action and Wilson O(a)-improved fermions. Our approach is based on the study of current-current correlation functions in position space and allows to determine  $\alpha_s$  (or alternatively the  $\Lambda$  parameter) with a competitive precision.

Primary author: CALÌ (\*), Salvatore (Jagiellonian University)

Co-authors: CICHY, Krzysztof; KORCYL, Piotr; SIMETH, Jakob

Presenter: CALÌ (\*), Salvatore (Jagiellonian University)

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