



Contribution ID: 91

Type: **Parallel**

## Low-energy constants from charmed baryons on QCD lattices

*Tuesday, 20 August 2019 16:40 (20 minutes)*

We study the light quark-mass dependence of charmed baryon masses as measured by various QCD lattice collaborations. A global fit to such data based on the chiral SU(3) Lagrangian is reported on. All low-energy constants that are relevant at next-to-next-to-next-to-leading order ( $N^3\text{LO}$ ) are determined from the lattice data sets where constraints from sum rules as they follow from large- $N_c$  QCD at subleading order are considered [1, 2]. The expected hierarchy for the low-energy constants in the  $1/N_c$  expansion is confirmed by our global fits to the lattice data. With our results the low-energy interaction of the Goldstone bosons with the charmed baryon ground states is well constrained and the path towards realistic coupled-channel computations in this sector of QCD is prepared.

[1] Y. Heo, M. F.M. Lutz, Phys.Rev. D97 (2018) no.9, 094004.

[2] Y. Heo, X.-Y. Guo, M. F.M. Lutz, Phys.Rev. D98 (2018) no.5, 054012

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**Session Classification:** Session 2: Baryon spectroscopy

**Track Classification:** Session 2: Baryon spectroscopy