

Sigma-Lambda state mixing from lattice QCD+QED

Thursday, August 6, 2020 5:20 PM (20 minutes)

Mixing in the $\Sigma^0-\Lambda^0$ system is a direct consequence of broken isospin symmetry and is a measure of both isospin-symmetry breaking as well as general SU(3)-flavour symmetry breaking. In this talk we present a novel scheme for calculating the extent of the physical $\Sigma^0-\Lambda^0$ mixing using simulations in lattice QCD+QED and discuss some of its features and initial results.

Primary author: KORDOV (*), Zeno (The University of Adelaide)

Co-author: CSSM/QCDSF/UKQCD

Presenter: KORDOV (*), Zeno (The University of Adelaide)

Session Classification: Hadron Spectroscopy and Interactions

Track Classification: Hadron Spectroscopy and Interactions