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The atmospheric muon charge ratio: a probe to constrain the atmospheric neutrino/anti-neutrino ratio

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The atmospheric muon charge ratio, defined as the number of positive over negative charged muons, is an important observable to shed light on the physics of cosmic ray interactions in atmosphere.
It allows studying the features of high-energy hadronic interactions in the forward region and the composition of primary cosmic rays.
In particular, the muon charge ratio provides sensitivity to the charge ratio of high energy kaons, the principal parents of atmospheric neutrinos.
In this talk the results from the OPERA experiment in the TeV energy range are reviewed.

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