

Contribution ID: 181 Type: Presentation

Search for muonic dark force at BABAR

Tuesday, 1 August 2017 14:30 (15 minutes)

Many models of New Physics postulate the existence new gauge bosons mediating interactions between "dark sectors" and the Standard Model. We present a search for a dark boson Z' coupling only to the second and third generation of leptons in the reaction e+e- -> mu+mu-Z', Z' -> mu+mu- with the full BABAR dataset. No significant signal is observed and limits improving upon bounds derived from neutrino experiments are set.

Primary author: Prof. PORTER, Frank (Caltech)

Co-author: BABAR COLLABORATION, - (-)

Presenter: ECHENARD, Bertrand (Caltech)

Session Classification: Dark Matter

Track Classification: Dark Matter