

Date: Aug. 6th

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Title: "Stringy Excited Baryons in Holographic QCD"

Abstract:

We present our recent analysis on excited baryons in top-down holographic QCD based on an intersecting D4/D8-brane system. Studies of baryons in this model have been made by regarding them as a topological soliton of a 5 dim gauge theory.

However, this allows one to obtain only a certain class of baryons. We propose a framework such that a whole set of excited baryons can be treated in a systematic way. The main idea is to describe a baryon as a D-brane with N_c open strings attached on it and consider the states with excited open strings. Using this description, we work out the spectra of excited baryons and compare them with the experimental data.

This talk is based on the work arXiv:2001.01461
done in collaboration with Y. Hayashi, T. Ogino and T. Sakai.