

JOINT TUFTS/MIT COSMOLOGY SEMINAR

More Axions from Strings

Giovanni Villadoro
ICTP

I will discuss the contribution to the QCD axion dark matter abundance that is produced by string defects during the so-called scaling regime. Clear evidence of scaling violations is found, the most conservative extrapolation of which strongly suggests a large number of axions from strings. In this regime, nonlinearities at around the QCD scale are shown to play an important role in determining the final abundance. The overall result is a lower bound on the QCD axion mass in the post-inflationary scenario that is substantially stronger than the naive one from misalignment.

Tuesday, September 22, 2020, 2:30 pm

Zoom link will be distributed to joint cosmology seminar mailing list. If not subscribed see <https://cosmos.phy.tufts.edu/mailman/listinfo/cosmology-seminar>

Tufts University