

Theoretical Physics Seminars

A Song Of Ice And Flavor

Speaker: Mr. Bhavesh Chauhan

From: Physical Research Laboratory, Ahmedabad

When: July 3 , 2017 Monday 4:00 pm

Place: Room No. 469

In the recent measurement of lepton flavor universality violation by LHCb, a 2.5 sigma deviation from the standard model prediction was observed. One of the most common explanations of these anomalies invokes leptoquarks with inter-generation Yukawa-like couplings. In this talk, I will show that the scalar doublet leptoquark with hypercharge $7/6$ can accommodate these recent flavor anomalies along with the excess in the anomalous magnetic moment of the muon, and the very high energy neutrino events observed at IceCube. Within this framework, the flavor anomalies are generated at one loop level, and IceCube events are explained via resonant production of the leptoquark.

All are welcome