

LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS (LEPP) Theory Seminar

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Theoretical Updates on the Flavor Anomalies



The charged current B-anomalies, referred to as RD and RD*, show around 3sigma discrepancy with the SM predictions. In this talk I will review the status of these anomalies and possible theoretical solutions. I will then talk about two related recent measurements (anomalies), FLD* and RJ/psi, and their implications about these theoretical solutions. Motivated by FLD* measurement, I will discuss a model generating a new dimension six vector-current operator. I will show that our setup is an indispensable part of any model that can potentially explainFLD*. If time permits, I will talk about (1) explaining the RK and RK* anomalies using our model, and (2) a new related asymmetry observable that can be measured at Belle.

Friday, November 15, 2019 1:00pm 401 Physical Sciences Building

LEPP, the Cornell University Laboratory for Elementary-Particle Physics, and CHESS resources have merged and a new lab, (CLASSE), has formed. LEPP's primary source of support is the National Science Foundation. Visit us at www.lepp.cornell.edu