SACRAMENTO STATE

Department of Physics and Astronomy

FALL 2022 Colloquium Series

"Optimization of the κ_{2V} Parameterization Metric in the $HH \rightarrow bb\tau_{had}\tau_{had}$ Decay Channel"

Kyle Granados

Sac State Physics Major, Senior Project Talk

Advisor: Joshua Moss

Di-Higgs events in the Large Hadron Collider are an indicator of the self-coupling of the Higgs Boson. This is of interest because these self-interactions give physicists insight into the properties of the Higgs Boson. Studies using LHC Run 2 data into the constraints of the Higgs self-coupling are currently being explored to understand the precision and limitations of these self-coupling events. The research conducted in this project presents these results in the scope of the work being done by the physics collaborators in the $HH \rightarrow bb\tau_{had}\tau_{had}$ analysis group in the ATLAS Experiment.

Thursday, December 8, 2022

4:00 – 5:20PM

MND1015

Open & Free to all students, faculty and public