Title: "New Physics Searches in the High Luminosity Era at the LHC."

Abstract: "As we reach the end of the second long data taking period at the Large Hadron Collider (LHC) based at CERN, no new particles have been discovered beyond the Higgs boson in 2012, yet many fundamental questions still remain unanswered. To maximize the sensitivity of searches for physics beyond the Standard Model as we enter the high luminosity era at the LHC, new methods and a deeper understanding of physics are vitally needed. This seminar discusses where we currently stand with a number of searches for a new heavy resonance using the data collected by the ATLAS detector, what critical problems they face, and some clear proposals for how to tackle those issues in the future. These proposals also lead to wider implications for the high energy physics community at large."