

Abstract Submitted  
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**Tau leptons as a probe for new physics at LHC** SARAH DEMERS,  
Stanford Linear Accelerator Center — The tau leptons identification with ATLAS experiment will be possible already at the early start of the data taking. The copious production of W and Z bosons decaying to the tau leptons will provide unique possibility to calibrate and understand identification of hadronically decaying tau's above the QCD background already with few hundreds of pb<sup>-1</sup>. With integrated luminosity of tens of fb<sup>-1</sup>, tau leptons will become an excellent probe for searching for the SM and MSSM Higgs boson, SUSY or extra dimensions. In the talk we review prospect for early physics and searches scenarios involving tau leptons.

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