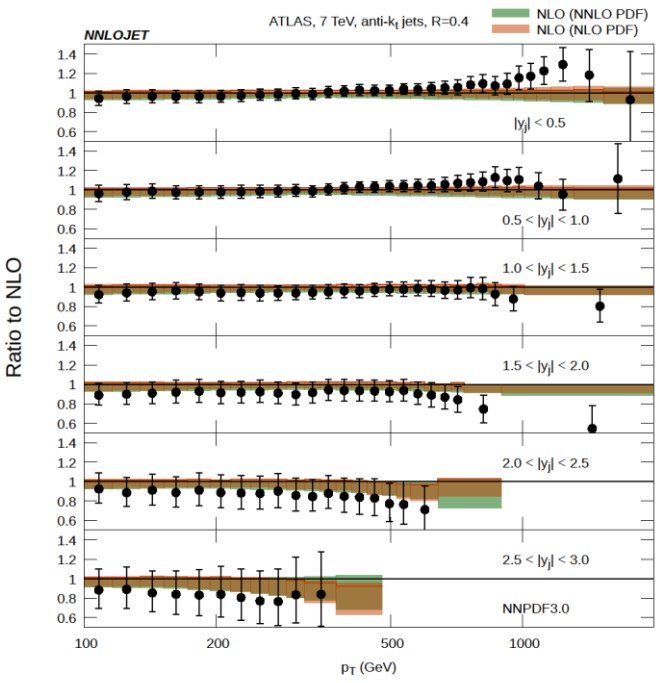
DESY
Physics Seminar

Theory challenges for the LHC.

Nigel Glover (Univ. of Durham)

Tuesday, 07 March 2017, 16:45 h, DESY Auditorium



In the absence of clear evidence of direct signal of new physics at the LHC, it is imperative that precise measurements are made to enable indirect searches. The full exploitation of the increasingly accurate data, requires theoretical predictions that are as precise as the experimental measurements. I review the state of the art and recent progress in fixed order calculations at next-to-next-to leading order (NNLO) and next-to-next-to next-to leading order (N3LO) in perturbative QCD. I will pay particular attention to the production of Higgs bosons, vector bosons and jets and discuss the recent NNLO calculation of fully differential jet production.

- **Coffee, tea and cookies will be served at 16:30h**
- **After the seminar there is a chance for private discussions with the speaker over wine and pretzels**