Contribution ID: **1445** Type: **Invited Speaker / Conférencier invité**

Searches for new physics with the ATLAS detector

Thursday 16 June 2016 13:15 (30 minutes)

In 2015, the Large Hadron Collider set a new record, colliding protons at a centre-of-mass energy of 13 tera electron volts. This increase in energy means an increase in sensitivity in searches for new physics for detectors at the LHC. ATLAS has completed a large number of searches for phenomena motivated by theories of physics beyond the Standard Model using the data collected at this energy.
One possible hint of new physics has been observed by both ATLAS and CMS in the diphoton spectrum. I will be discussing this excess and its implications for new physics.
I will also be presenting results from searches for microscopic black holes, the existence of which could point to new physics. This talk will present new limits from this and other searches with the ATLAS detector, and the subsequent outlook for physics beyond the Standard Model.

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Session Classification: R2-2 Energy Frontier: Further Developments (PPD) / Frontière d'énergie: développements futurs (PPD)

Track Classification: Particle Physics / Physique des particules (PPD)