

## Particle Physics Challenges



Contribution ID: 65

Type: **not specified**

## The Heavy Metal Path to New Physics

*Thursday 27 September 2018 14:00 (20 minutes)*

We explore the potential to test weakly coupled New Physics in heavy ion collisions. We find that the data from heavy ion collisions at the HL-LHC can yield constraints that are only an order of magnitude weaker than those expected from proton-proton collisions for generic parameter choices in well-motivated New Physics scenarios, and that they may even achieve the same sensitivity in some corners in the parameter space.

**Primary authors:** ANDREA, Giammanco (UC Louvain); Dr HAJER, Jan (UC Louvain); DREWES, Marco (UC Louvain); Dr LUCENTE, Michele (CP3 - UCLouvain); MATTELAER, Olivier (UC Louvain)

**Presenter:** HAJER, Jan

**Session Classification:** Parallel Session: Pheno 4

**Track Classification:** Particle Phenomenology