

## Heavy Ions in Pythia8

*Thursday, 14 December 2017 14:00 (15 minutes)*

Angantyr is a new model for collisions involving heavy nuclei in Pythia8. It is inspired by the old Fritiof model, but includes more perturbative physics and a more careful consideration of fluctuations in nucleon-nucleon cross sections, and the related diffractive processes. In the current implementation in Pythia8 parton-level nucleon-nucleon minimum bias events are stacked together and hadronised independently, which means no collective effects are modelled, but the plan is to also include string interaction effects, such as string *shoving*, colour reconnection and rope hadronisation (see separate talk) where such effects will be present.

**Primary authors:** LÖNNBLAD, Leif (Lund University (SE)); BIERLICH, Christian (Lund University (SE)); GUSTAFSON, Gosta (Lund University); SHAH, Harsh (Lund University)

**Presenter:** LÖNNBLAD, Leif (Lund University (SE))

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