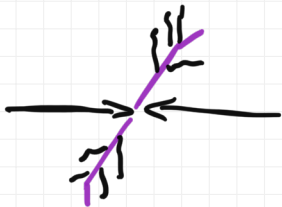


Dark showers & Pythia

... round table discussion.

P. Ilten, S. Mrenna, S. Prestel

Dark production



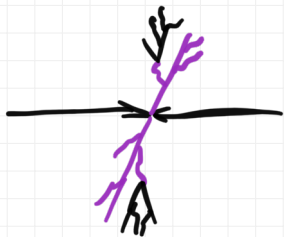
- Straight forward for simple procs (e.g. dark quark pair) → LHEF or built-in

- Less simple for more complex procs (e.g. with additional jets) ... merging of extra hard QCD possible

- Challenging for complex procs (e.g. soft bombs)

⇒ Do we need a pythia-contrib system?

Perturbative dark showers



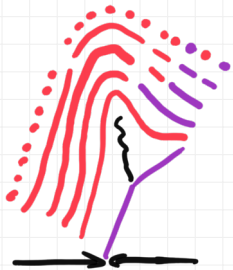
- Available in collinear approx.
(... *iffy* for soft, no ME corr. @LHC)
- Quite configurable
- Multiple hard objects *iffy*
... no merging...

Q: Configuration via SLHA?

Q: Order-of-magnitude or w/ uncertainties?

...

Dark hadronization



- Detailed but specific QCD-like model
- Hard to adjust spectrum from outside?

Q: Need for flexibility?

Q: Enable modified string decay with new "SLHA decay block"?