## Diffraction and Low-x 2018



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## Superchic supercharged: an updated generator for exclusive production

A new release of the SuperChic Monte Carlo event generator for central exclusive production (CEP) processes will be presented. Updates include: the addition of photon and QCD-induced production in heavy ion collisions (with a full treatment of absorptive effects); the addition of a range of new processes, such as the production of axion-like particles, electroweakly coupled SUSY states, monopoles and monopolium; an improved treatment of light-by-light scattering including W boson loops. A discussion of these improvements, and a range of phenomenological results, will be presented.

Primary author: HARLAND-LANG, Lucian (University of Oxford)

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