



Contribution ID: 16

Type: **not specified**

## Photon splitting corrections to soft-photon resummation

*Friday, 9 June 2023 14:30 (20 minutes)*

In this talk I will motivate the importance of including QED corrections in a systematic and automated manner. I will present an algorithm to add photon-splitting corrections to the Yennie-Frautschi-Suura-style soft-photon resummation available in the Sherpa Monte-Carlo event generator. Then, I will introduce different lepton dressing strategies which incorporate further leptons and hadrons in addition to the customary photons, and discuss their sensitivity to dressing parameters such as the cone size. I will then present some results for academic and realistic setups.

**Presenter:** FLOWER, Lois (Durham University)

**Session Classification:** Parton showers