## 11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Beitrag ID: 149

Typ: Poster

## Prompt photon production with up to three jets in POWHEG

Dienstag, 28. März 2023 18:15 (2 Stunden)

The production of prompt photons in association with jets is a very sensitive probe of the gluon distribution in light and heavy nuclei as well as of the properties of the quark-gluon plasma. We present a new calculation of prompt photon production with up to three jets at next-to-leading order of (NLO) QCD matched to parton showers with the POWHEG method. As applications, we examine correlations between the photon and the produced up to three jets as well as different approaches to photon fragmentation.

## **Experiment/Theory**

Theory/Phenomenology

## Affiliation

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Sitzung Einordnung: Poster Session

Track Klassifizierung: Electromagnetic and electroweak probes