

# 10th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Contribution ID: 265

Type: **Oral Presentation**

## Study of in-medium momentum broadening with photon-jet momentum correlations in PbPb collisions at 5.02 TeV in the CMS experiment

*Monday, June 1, 2020 1:35 PM (20 minutes)*

Studies of jet energy loss and momentum broadening with photon-jet momentum and angular correlations will be presented, with PbPb data at 5.02 TeV collected by the CMS detector. Photon-jet events provide a means of probing in-medium jet energy loss with good constraints on the initial parton kinematics and flavor. Studies of momentum and angular correlations in photon-jet events can enable precision measurements of jet quenching effects, such as energy loss and momentum broadening, which are important towards a full understanding of the underlying mechanisms of jet quenching.

### Collaboration (if applicable)

CMS

### Track

Initial State

### Contribution type

Contributed Talk

**Primary author:** PETRUSHANKO, Serguei (M.V. Lomonosov Moscow State University (RU))

**Presenter:** TAYLOR, Molly (Massachusetts Inst. of Technology (US))

**Session Classification:** Parallel

**Track Classification:** Initial State