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Type: **Poster**

## Measurement of isolated photons in p–Pb collisions at 5.02 TeV with the EMCal detector in ALICE

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In high energy hadron collisions, direct photons can be produced at different stages and are of particular interest to study the hot QCD medium since they escape it without being affected.

At high transverse momentum ( $p_T$ ), these photons may come from hard scattering processes (prompt photons) and from high  $p_T$  parton fragmentation. Their measurement in proton-proton collisions allows to test pQCD and to put constraints on parton distribution functions. In proton-ion collisions (e.g., p–Pb), measuring direct photons enables to study cold nuclear effects and especially access nuclear parton distribution functions (nPDF). Their knowledge is crucial to understand the direct photon production in a context of hot nuclear matter where other mechanisms occur in addition.

One can access prompt photons experimentally with an isolation procedure. The isolated photon production in p–Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV measured with the ALICE ElectroMagnetic Calorimeter (EMCal) will be discussed in this poster.

### Content type

Experiment

### Collaboration

ALICE

### Centralised submission by Collaboration

Presenter name already specified

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