

# The Matrix Element Method used in the search for the associated production of the Higgs boson with top quarks and decaying into tau leptons at CMS

*Friday, 6 July 2018 20:15 (15 minutes)*

Latest results of CMS searches for a Higgs boson produced in association with top quarks in final states with tau leptons will be presented. The poster will specifically focus on technical aspects related to the Matrix Element Method implementation and on its impact on the sensitivity of the analysis. The analysis presented here uses proton-proton collision data collected at center-of-mass energies of 13 TeV during the Run II of the LHC.

**Primary author:** Dr ZABI, Alexandre (LLR-Ecole Polytechnique CNRS-IN2p3)

**Co-author:** LOBANOV, Artur (LLR –Ecole Polytechnique (FR))

**Presenters:** Dr ZABI, Alexandre (LLR-Ecole Polytechnique CNRS-IN2p3); LOBANOV, Artur (LLR –Ecole Polytechnique (FR))

**Session Classification:** POSTER

**Track Classification:** Posters