



Contribution ID: 15

Type: **not specified**

## Checkmating your favourite BSM model

*Wednesday 2 October 2013 17:00 (45 minutes)*

The LHC is currently producing a wealth of new data and both ATLAS and CMS provide lots of analyses that theorists are eager to test their new models with. However, tuning detector simulations, understanding the analysis' details and interpreting the results can be a tedious (and boring) task. We therefore aim to simplify and automatise that procedure.

We present a new program, CheckMATE, that is simple to use and only requires simulated event files and cross sections as input. It will then automatically tell the user whether the particular model is allowed or excluded by comparing to current LHC data. If desired, the program can furthermore calculate confidence limits and provide detailed information about signal regions of interest. It also allows for an easy extension to upcoming LHC results in the future.

**Primary authors:** Mr SCHMEIER, Daniel (BCTP, University of Bonn); Dr TATTERSALL, Jamie (BCTP, University of Bonn); Dr KIM, Jong Soo (University of Adelaide, Australia / IFT Madrid, Spain); Prof. DREES, Manuel (BCTP, University of Bonn)

**Presenter:** Mr SCHMEIER, Daniel (BCTP, University of Bonn)

**Session Classification:** SUSY and other BSM - Topical Talks 2