Contribution ID: **6**   Type: **not specified**

Calculating p-values for excesses in combinations of LHC searches

Wednesday, 3 April 2019 15:50 (25 minutes)

Calculating p-values to quantify the statistical significance of any excesses in an individual LHC analysis is usually a routine task for LHC experimentalists, however theories of physics Beyond the Standard Model typically make predictions that are relevant to many LHC analyses at once. If excesses appear in several analyses it is thus of great importance to accurately assess their *joint* statistical significance. In this talk I will discuss some methods for doing this, as well as some important limitations that exist at present; in particular, performing accurate look-elsewhere corrections for BSM signals is often prohibitively difficult.

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Session Classification: Session 3