Contribution ID: **4** Type: **not specified**

Supersymmetric decays in Softsusy

Thursday, 12 January 2017 09:00 (25 minutes)

I will discuss the addition of a decay calculator to the SoftSusy spectrum generator program currently used for susy searches. The new version of softsusy -4.0 will therefore now be able to provide all-in-one spectrum generation and decay calculation including all tree-level Susy $1 \longrightarrow 2$ decays, relevant $1 \longrightarrow 3$ decays, all relevant higgs decays including Zgamma, gamma gamma, glu glu, and crucially, all NMSSM $1 \longrightarrow 2$ decays. The motivations and benefits for adding such decays to the program will be explained, along with how the program works, how to use it and some interesting scenarios the program can help examine.

Primary author: Mr CRIDGE, Thomas (DAMTP, University of Cambridge)

Co-author: Dr ALLANACH, Benjamin (University of Cambridge)

Presenter: Mr CRIDGE, Thomas (DAMTP, University of Cambridge)

Session Classification: Parallel Sesion: BSM Phenomenology