

# CU Physics Department Particle Seminar

Friday, November 20, 2009 831 Pupin Hall 1:30 PM

## Search for Third Generation Squarks in the Missing Transverse Energy plus jet Sample at CDF

I will present the searches for gluino-mediated sbottom, and stop direct production decaying into charm and neutralino using CDF II data. These signatures translate into final states with large missing transverse energy and jets, where at least one of the jets is required to be tagged as originated from a heavy flavor quark. I will describe the analysis techniques and optimization tools, focusing on data driven methods to estimate heavy flavor multijet backgrounds and charm tagging, both especially developed for these analyses.

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