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Type: Oral Presentation

Constraints on Dark Matter Models using current LHC Measurements

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In an era where high energy particle physics is having to transition from a theory-driven to a data-driven approach, the traditional method of performing specific searches off of theory models may be inefficient. Contur (Constraints On New Theories Using Rivet) was designed as a means to quickly exclude BSM models based off the many LHC measurements currently contained in Rivet. Focusing on track based measurements, the sensitivity of Contur to some Dark Matter models was explored. The exclusion potential of soft unclustered energy patterns (SUEP) and different dark sector jets scenarios will be presented.

Apply to be considered for a student ; award (Yes / No)?

Yes

Level for award;(Hons, MSc, PhD, N/A)?

MSc

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