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## The Space of Collider Events (20'+10')

*Monday 22 July 2019 17:30 (30 minutes)*

When are two collider events similar? In this talk, I answer this question by developing a metric between the events based on the earth mover's distance: the "work" required to rearrange one event into the other. With a metric in hand, I will focus on exploring the metric space of jets. Our metric allows us to visualize the space of jets, extract their dimensionality, perform jet classification, make contact with existing observables, identify the most and least typical jet configurations, and quantify the impact of detector effects in new ways.

**Primary authors:** METHODIEV, Eric (Massachusetts Institute of Technology); KOMISKE, Patrick (Massachusetts Institute of Technology); THALER, Jesse (MIT)

**Presenter:** METHODIEV, Eric (Massachusetts Institute of Technology)

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