Institut Henri Poincaré

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String Theory in Greater Paris

Rencontres Théoriciennes

“Supergravité, théorie des cordes et théorie M”

Jeudi 21 Novembre 2024, 11:45

Ian Moult

Yale

Energy Correlators at the Collider Frontier

Correlation functions of the average null energy (ANE) operator provide a direct link between quantum field theory and collider physics observables. We will discuss recent advances in our understanding of these correlation functions, and show that they can be directly measured in real collider data. We then discuss several applications of recent measurements, ranging from precision extractions of the strong coupling constant from the scaling properties of light-ray operators, to characterizing the quark gluon plasma with higher twist light-ray operators.

Institut Henri Poincaré, salle 314, 3ème étage