

# PHYSICS COLLOQUIA 2018



> Jets are collimated sprays of particles that arise from quantum chromodynamics (QCD) at high energies. Though the phenomena of jets has been known for over four decades, our ability to look inside jets and study their substructure has advanced rapidly with the remarkable detector performance at the Large Hadron Collider (LHC). In this talk, I highlight the increasingly important role that jet substructure is playing in searches for new physics at the LHC, especially when exploring extreme kinematic regimes involving large Lorentz boosts. I also explain how innovative theoretical studies of jet substructure have taught us surprising lessons about the dynamics of QCD.

27

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> **Jet substructure at the frontiers of particle physics**



**UNIVERSITÀ DEGLI STUDI DI MILANO**  
DOTTORATO DI RICERCA IN FISICA  
ASTROFISICA E FISICA APPLICATA

Gli incontri si terranno alle **ore 14:30**  
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