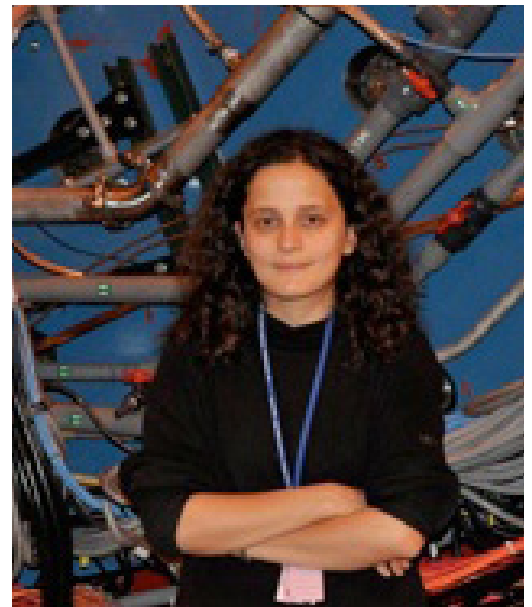


PHYSICS AND ASTRONOMY COLLOQUIUM

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Probing the Quark Gluon Plasma with Jets

During the last three decades, relativistic heavy ion collisions have been studied to map out the phase diagram of quantum chromodynamics (QCD) matter at increasing center-of-mass energies of <5 GeV at the Alternating Gradient Synchrotron in Brookhaven, <20 GeV at the the Super Proton Synchrotron at CERN and 200 GeV at the Relativistic Heavy Ion Collider in Brookhaven. More recently, the Large Hadron Collider (LHC) at CERN started delivering heavy ion collisions (Pb+Pb) at a center-of-mass energy of 2.76 TeV per nucleon pair along with reference data of pp and p+Pb collisions. With its unprecedented reach in energy, LHC explores new regions of the phase diagram that can resolve fundamental questions regarding confinement, such as “What determines the key features of QCD?” and “How does the hot QCD respond to jet energy loss?”. In this talk, an overview of the recent experimental results on jet production in heavy-ion collisions is presented to study the detailed properties of the hot QCD matter.



THURSDAY, APRIL 16, 2015 | 4:00 PM | HAWKING AUDITORIUM



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