

# PHYSICS DEPARTMENT COLLOQUIUM

“BLACK HOLES IN THE LAB OR SKY?”

BY

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Certain scenarios with extra dimensions of space predict that gravity becomes very strong at energies near the TeV scale. If such a "TeV-scale gravity" framework describes nature, it should be possible to make black holes at future particle accelerators, perhaps beginning with the LHC near Geneva. At sufficiently high energies, black hole production will be prolific, and black hole decay via Hawking radiation should be very visible in detectors. It also may be possible to observe black hole creation by ultra-high energy cosmic rays. Once observed, black hole production may well represent the end of our long quest to understand physics at ever-shorter distances.

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Tuesday, April 5  
10:30 AM  
110 INSCC (Auditorium)