

'Visions from Star Trek could become reality this century'

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“IF ONE can understand space at the microscopic, sub-atomic levels, then we can understand space like never before and perhaps what we see in the 24th century in movies such as Star Trek, could be happening in this century itself,” said Ashutosh Kotwal, particle physicist, Duke University, North Carolina. Kotwal has made major contributions in the measurement of fundamental parameters of the Large Hadron Collider (LHC) experiments at CERN, Geneva. In a bid to in-

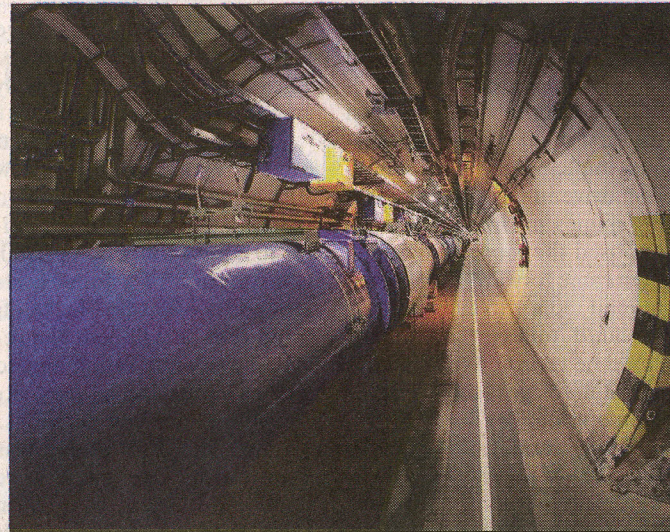
crease the participation of scientists and students from Pune at CERN, Kotwal plans to enter into dialogues with particle physics institutions in the city.

“While there is a significant percentage of Indian scientists involved in various aspects of LHC, there is no participation from Pune. We have people from BARC and TIFR in Mumbai, and universities in Delhi, Indore, Bhubaneswar, and a very active participation from Kolkata but nobody from Pune, home to many scientific institutions,” said Kotwal, whose parents live in Pune.

He hopes to take back with him some positive develop-

ments in this direction and involve scientists and students from Pune who may be interested in the analysis of the data collected by the LHC.

Kotwal will deliver a lecture on 'Higgs boson, Dark Matter and Black Holes, revolutionising the laws of the universe with Large Hadron Collider' on Tuesday at Abasaheb Garware College. Organised by the Global Indian Scientists and Technocrats organisation (GIST), the lecture will focus on the Large Hadron Collider (LHC) project underway at the CERN Laboratory in Geneva, Switzerland and the research being conducted in the field of



Kotwal will talk on research in the field of particle physics

particle physics. Kotwal, having completed his schooling from Mumbai, completed his undergraduate education at the University of Pennsylvania and a PhD from Harvard University. He has been a professor at Duke since 1999. Talking about his work at the LHC, he explained, “It is an exploratory project, where we are trying to create evidence to prove certain properties of space that we believe it has. I’m looking at finding alternatives to silicon as a particle detector. Also if we can reduce the cost of the magnets, it will even bring down the costs of various applications like MRI scan machines used for all

major medical technology today.”

The lecture on Tuesday will be conducted with the objective of creating awareness regarding this project and the research being conducted at CERN. “By way of this lecture we want to inspire students to explore fundamental physics and the research involved,” said Shrikant Kulkarni, GIST. The event on Tuesday will be presided over by Prof. Govind Swarup, former Director, Giant Metrewave Radio Telescope (GMRT). A similar lecture is set to be conducted on June 22 at IUCAA which will be exclusively for scientists and researchers.