

# SCIENCE SEMINAR

FRIDAY, NOVEMBER 7  
KNOTT HALL B01  
3PM

## LARGE HADRON COLLIDER: UNLOCKING THE SECRETS OF THE UNIVERSE

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THE LARGE HADRON COLLIDER HAS BEEN RECENTLY COMPLETED AND, ON SEPTEMBER 10TH 2008, THE PROTON BEAMS WERE SUCCESSFULLY CIRCULATED IN THE MAIN RING OF THE LHC FOR THE FIRST TIME. IT IS THE LARGEST, HIGHEST-ENERGY AND MOST EXPENSIVE PARTICLE ACCELERATOR EVER BUILT. OVER 10,000 SCIENTISTS AND ENGINEERS FROM OVER 100 COUNTRIES WILL BE WORKING AT LHC FOR MANY YEARS TO DISCOVER THE HIGGS BOSON AND SUPERSYMMETRIC PARTICLES, TO UNDERSTAND THE NATURE OF DARK MATTER AND DARK ENERGY, TO INVESTIGATE THE PRESENCE OF EXTRA DIMENSIONS. IN THIS TALK, I WILL ILLUSTRATE HOW THE COLLIDER WORKS AND WILL DISCUSS THE NATURE OF THESE DISCOVERIES AND THEIR LIKELIHOOD AND IMPLICATIONS.

REFRESHMENTS WILL BE SERVED