## LABORATORI NAZIONALI DEL GRAN SASSO

## SEMINAR ANNOUNCEMENT

## Nicola Spaldin

Materials Department of University of California Santa Barbara

## "Computational Design of New Multifunctional Materials: From Magnetoelectronics to a Theory of Everything"

Modern computational methods are proving to be invaluable in the first-principles design of new materials with specific targeted functionalities. I will illustrate their utility with two examples from the field of multiferroics: First, the design of new materials for electric-field control of magnetism, and second, testing extensions to the Standard Model by searching for the electric dipole moment of the electron.