

# Adventures in Urban Informatics

October 27<sup>th</sup> 2015 16:00

**G S** GRAN SASSO  
SCIENCE INSTITUTE  
**S I** CENTER FOR ADVANCED STUDIES  
Istituto Nazionale di Fisica Nucleare

**GSSI Main Lecture Room  
October 27<sup>th</sup>, 2015 4pm  
Viale Crispi 7, L'AQUILA**

**Steven E. Koonin - Director  
CUSP Center for Urban Science and Progress  
New York University**



**Abstract:** For the first time in history, more than half of the world's population lives in urban areas; in just a few more decades, the world's population will exceed 9 billion, 70 percent of whom will live in cities. Enabling those cities to deliver services effectively, efficiently, and sustainably while keeping their citizens safe, healthy, prosperous, and well - informed will be among the most important undertakings in this century. I will review how we are establishing a center for urban science and focus on bringing informatics to the study and operation of urban systems. I will touch on the rationale, the structure, and the substance of the Center's work and the ways in which it will enrich NYC and contribute to global issues. Taxis, lights, sewers, phones, and buildings will all enter into the discussion in novel ways.

**Steven E. Koonin** was appointed as the founding Director of NYU's Center for Urban Science and Progress in April 2012. That consortium of academic, corporate, and government partners will pursue research and education activities to develop and demonstrate informatics technologies for urban problems in the "living laboratory" of New York City. Prior to his NYU appointment, Dr. Koonin served as the second Under Secretary for Science at the U.S. Department of Energy from May 2009 through November 2011. In that capacity, he oversaw technical activities across the Department's science, energy, and security activities and led the Department's first Quadrennial Technology Review for energy. Before joining the government, Dr. Koonin spent five years as Chief Scientist for BP plc, where he played a central role in establishing the Energy Biosciences Institute. Dr. Koonin was a professor of theoretical physics at California Institute of Technology (Caltech) from 1975-2006 and was the Institute's Provost for almost a decade. He is a member of the U.S. National Academy of Sciences and the JASON advisory group. Dr. Koonin holds a B.S. in Physics from Caltech and a Ph.D. in Theoretical Physics from MIT (1975) and is an adjunct staff member at the Institute for Defense Analyses