



同济大学

TONGJI UNIVERSITY

1239 SIPPING ROAD, SHANGHAI 200092
THE PEOPLE'S REPUBLIC OF CHINA

国际学术交流报告

题目：Large-Scale Testing of Structures for Hurricane, Tornado and Downburst

飓风、龙卷风和下击暴流作用下的结构大尺度试验——“风房”和“风墙”

摘要：Large-scale experimental capability focusing on the complex interaction between hurricanes, tornado and downburst and the built environment is necessary to develop a cohesive and systemic approach to build wind-resilient communities. This seminar will focus primarily on the workings of the WindEEE (Wind Engineering Environment and Energy) Dome facility capable of generating complex wind systems such as Tornado, downburst and hurricanes. The various scenarios such as those used for generating translating tornado and downburst, hurricane forces at large scale or high speed, and wind driven-rain/snow capabilities will be discussed. In addition, other emerging hurricane testing facilities such as the “Wall of Wind”, will be presented.

报告人：Dr. Girma Bitsuamlak, Associate Professor
Canada Research Chair in Wind Engineering
Associate Director WindEEE Research Institute
Boundary Layer Wind Tunnel Laboratory
University of Western Ontario, Canada

时间：2013年6月13日 10:00-11:30

地点：桥梁馆一楼报告厅 主持人：葛

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Introduction of the Speaker



With a background in building and wind engineering, Dr. Bitsuamlak's research interest and experience include experimental and computational wind engineering, and science of buildings. He has been educated in Addis Ababa, Indian Institute of Technology Roorkee, and Concordia Universities. Recently, Dr. Bitsuamlak has been named Canada Research Chair in wind engineering and serves as an associate director of the WindEEE Research Institute.

Prior to joining Western, he has worked as an assistant professor at Florida International University in Miami and as senior Wind Engineer with RWDI Inc (a world leading wind consulting firm) in Guelph, Ontario. While at FIU, Dr. Bitsuamlak won a prestigious NSF-CAREER award for a project on multi-scale computational wind load evaluation on buildings in 2009 and co-developed a hurricane testing facility “Wall of Wind”. While at RWDI he has executed experimental aeroelastic analysis of super-tall buildings such as Freedom Tower in New York and Burj Khalifa in Dubai in a boundary layer wind tunnel.