Univalent Formalization of Mathematics with Proof Assistant Coq

Professor Vladimir Voevodsky
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Princeton, New Jersey, USA

Date : 8, 15, 22 August 2014 (Friday)
Time : 10.30 am – 11.30 am
Venue : SPMS MAS Executive Classroom 2 (SPMS-MAS-03-07)

Kindly register here https://wis.ntu.edu.sg/pls/webexe/REGISTER_NTU.REGISTER?EVENT_ID=OA14080416165587

Abstract:
Professor Voevodsky will give 3 seminars on "Univalent Formalization of Mathematics with Proof Assistant Coq". The main reading of the topic is the paper at http://arxiv.org/abs/1401.0053. It would also be useful to download and install on your computers Proof Assistant Coq from here: http://coq.inria.fr.

Speaker:
Professor Vladimir Voevodsky is a Russian mathematician. His work in developing a homotopy theory for algebraic varieties and formulating motivic cohomology led to the award of a Fields Medal in 2002. He attended the Moscow State University and received his Ph.D. in mathematics from Harvard University in 1992, advised by David Kazhdan. Currently he is a full professor at the Institute for Advanced Study in Princeton, New Jersey. Professor Voevodsky's work is in the intersection of algebraic geometry with algebraic topology. Along with Fabien Morel, Professor Voevodsky introduced a homotopy theory for schemes. He also formulated what is now believed to be the 'correct' form of motivic cohomology, and used this new tool to prove Milnor's conjecture relating the Milnor K-theory of a field to its étale cohomology. For the above, he received the Fields Medal, together with Laurent Lafforgue, at the 24th International Congress of Mathematicians held in Beijing, China. Professor Voevodsky is co-author of Cycles, Transfers and Motivic Homology Theories, which develops the theory of motivic cohomology in some detail. In January 2009, at an IHES anniversary conference for Alexander Grothendieck, he announced a proof of the full Bloch-Kato conjectures.

Host: Assoc Prof Wang Huaxiong, School of Physical and Mathematical Sciences