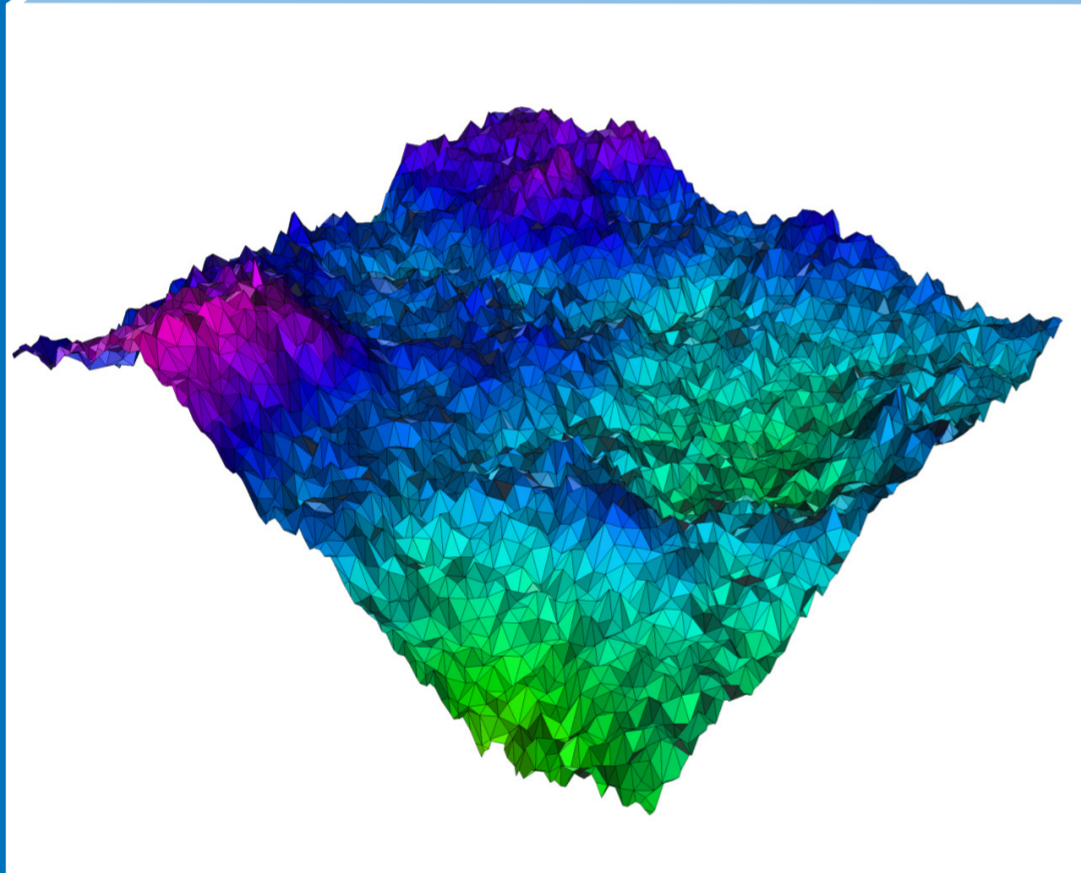# Berlin Mathematical School

BMS Friday Colloquium

Friday 8 July 2011 at 14:15
Tea before the lecture begins at 13:00

BMS Loft, Urania, An der Urania 17, 10787 Berlin

Wendelin Werner
(U Paris Sud - Orsay)

Random surfaces and their geometry

Is there a natural universal analogue of Brownian motion for random surfaces or membranes? If so, are there essential differences between these random real-valued functions defined on an interval (i.e. Brownian motion) or on a piece of the plane (this random membrane)? Are there really random surfaces? Is there a way to describe the topography of these random surfaces?

Wendelin Werner will try to discuss and partially answer such questions.

Wendelin Werner is a German-born French mathematician working in the area of self-avoiding random walks, Schramm-Loewner evolution, and related theories in probability theory and mathematical physics. In 2006, at the 25th International Congress of Mathematicians in Madrid, he received the Fields Medal. His other awards include the Fermat Prize in 2001, the Loève Prize in 2005, and the 2006 SIAM George Pólya Prize with his collaborators Gregory Lawler and Oded Schramm. He became a member of the French Academy of Sciences in 2008. He is professor at the University of Paris-Sud in Orsay and part-time at the École Normale Supérieure.

In 2011 and 2012 Wendelin Werner is an 'Einstein Visiting Fellow' at the BMS.

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