Topologies of nodal sets of random band limited functions

Igor Wigman (King's College London)

Time **Thursday, Dec 18, 2014 at 16:00**
Place **Campus Kirchberg, room B04**

It is shown that the topologies and nestings of the zero and nodal sets of random (Gaussian) band limited functions have universal laws of distribution. Qualitative features of the supports of these distributions are determined. In particular the results apply to random monochromatic waves and to random real algebraic hyper-surfaces in projective space. This work is joint with Peter Sarnak.