Department of Mathematics and Computer Science
@ St.Petersburg State University

COLLOQUIUM

Thursday, March 3, 17:15

Zoom 933-271-498, room 201 (14th line V.O., 29)

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Gaussian fields and percolation

Twenty years ago Bogomolny and Schmit made a conjecture which links the zero set of a random plane wave and the critical percolation on the square lattice. Their precise formulation is unlikely to be correct, but since then it became apparent that there is a deep connection between level sets of smooth stationary Gaussian fields and percolation models. Although this conjecture is far from being resolved, there was a lot of progress in understanding this connection. In this talk, I will give a survey of this area of research and will discuss some recent results that strongly suggest that some form of the Bogomolny-Schmit conjecture should be true.

Everyone is welcome!