Stuttgarter Physikalisches Kolloquium

Fachbereich Physik, Universität Stuttgart
Max-Planck-Institut für Festkörperforschung
Max-Planck-Institut für Intelligente Systeme

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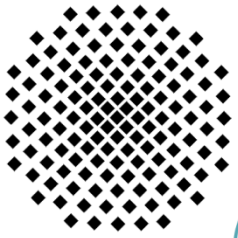

Dienstag, 28. Oktober 2014	17:15 Uhr	Hörsaal V 57.01

Universität Stuttgart, Pfaffenwaldring 57, 70569 Stuttgart-Vaihingen

Gastgeber: Prof. Martin Dressel / Ilja Gerhardt, Universität Stuttgart, Telefon: 0711 - 685-64946

Randomness in physics

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Abstract

Abstract: Although randomness appears to be ubiquitous in Nature, generating high-quality random numbers is a highly non-trivial task. Inspired by insights in quantum information theory, substantial progress has been made recently in our theoretical understanding of randomness, and novel methods for random number generation using quantum phenomena have been proposed and experimentally tested. In this talk, I will discuss these latest developments, focusing on the significance of randomness in experiments related to the foundations of quantum theory.