Massachusetts Institute of Technology Department of Physics

Condensed Matter Theory Seminar

"The renormalization group of quenched disorder"

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Abstract: A systematic analysis of theories with disorder is performed using renormalization group flow, focusing on the quantum case. This can be done despite the appearance of non-locality in time in the replica theory, leading to several interesting results. The dynamical scaling exponent is shown to be related to a flow of a particular coupling constant, and has a universal form at weak disorder. The renormalization group flow also leads to the identification of new critical exponents.

12:00pm noon Friday, September 28, 2018 Duboc Room (4-331)

Host: Senthil Todadri