

CALENDAR OF EVENTS <http://physics.illinois.edu/bluesheet.asp>

Thursday, December 7, Mathematical and Theoretical Physics Seminar:

“Conformal Truncation: A New Method for Strongly-Coupled QFTs” Zuhair Khandker; 12:30 pm in 222 Loomis

Friday, December 8, High Energy Phenomenology Seminar: “TBA”; 12:00 pm in 222 Loomis

Job Opportunity

Postdoctoral Position in Quantum Many-Body Theory & Topological Phases

Research Associate in Quantum Many-Body Theory x 2

Applications are invited for two Postdoctoral Research Associate positions, funded by an ERC Starting grant, to work with Dr B. Beri at the Department of Physics and/or the Department of Applied Mathematics and Theoretical Physics, University of Cambridge. The posts are for theoretical investigations of quantum many-particle systems, including certain strongly correlated forms of topological phases, in part motivated by developments in solid-state quantum devices, ultracold atoms, and quantum information theory.

Closing date: 10 January 2018

For further details about the post and to apply please follow the link below:
<http://www.jobs.cam.ac.uk/job/15952/>

CALENDAR OF EVENTS <http://physics.illinois.edu/bluesheet.asp>

Thursday, December 7, Mathematical and Theoretical Physics Seminar:

“Conformal Truncation: A New Method for Strongly-Coupled QFTs” Zuhair Khandker; 12:30 pm in 222 Loomis

Friday, December 8, High Energy Phenomenology Seminar: “TBA”; 12:00 pm in 222 Loomis

Job Opportunity

Postdoctoral Research Position Theory of Novel Superconductors

A postdoctoral research fellowship in the Hirschfeld group in the theory of novel superconductors is available beginning as early as January 2018, or as late as September 2018.

Some experience with electronic structure theory, as well as superconductivity theory, is desirable but not required. Candidates should email a c.v., brief statement of research interests and three letters of reference before December 31, 2017 to mcolson@ufl.edu, ([Ms. Marcia Colson, Condensed Matter Theory, U. Florida Physics](#)).

CALENDAR OF EVENTS <http://physics.illinois.edu/bluesheet.asp>

Thursday, December 7, Mathematical and Theoretical Physics Seminar:

“Conformal Truncation: A New Method for Strongly-Coupled QFTs” Zuhair Khandker; 12:30 pm in 222 Loomis

Friday, December 8, High Energy Phenomenology Seminar: “TBA”; 12:00 pm in 222 Loomis

Mathematical and Theoretical Physics Seminar

Title: “Conformal Truncation: A New Method for Strongly-Coupled QFTS”

Speaker: Zuhair Khandker, University of Illinois at Urbana-Champaign

Date: Thursday, December 7 **Time/Location:** 12:30 pm / 222 Loomis

Abstract: I will present a new numerical method for studying strongly-coupled QFTs in any dimension. The method harnesses conformal symmetry, but in a manner applicable to general, non-conformal QFTs. The input is information about the UV CFT from which the QFT originates. The output is the physical QFT spectrum, along with real-time, infinite-volume correlation functions. So far, we have used the method to study 2D ϕ^4 theory. I will present new results for correlation functions at any coupling, including the Zamolodchikov c -function along the full RG-flow. I will also present a non-trivial cross-check of our numerical results: for a critical value of the coupling, ϕ^4 theory flows to the Ising model, and we match known analytical predictions.

CALENDAR OF EVENTS <http://physics.illinois.edu/bluesheet.asp>

Thursday, December 7, Mathematical and Theoretical Physics Seminar:
“Conformal Truncation: A New Method for Strongly-Coupled QFTs” Zuhair
Khandker; 12:30 pm in 222 Loomis

Friday, December 8, High Energy Phenomenology Seminar: “TBA”; 12:00 pm
in 222 Loomis

High Energy Phenomenology Seminar

Title: “TBA”

Speaker: TBA

Date: Friday, December 8

Time/Location: 12:00 pm / 222 Loomis

Abstract: TBA