

Analysis Seminar

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Hamiltonian Evolution Equations -- Where They Come From, What They Are Good For

Series: Analysis Seminar

Juerg Frohlich

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Date & Time: Tue, 01/22/2013 - 15:15 - 16:15

Location: S-101

Video Link:

<http://video.ias.edu/1213/analysis/0122-JuergFrohlich>

Several examples of Hamiltonian evolution equations for systems with infinitely many degrees of freedom are presented. It is sketched how these equations can be derived from some underlying quantum dynamics ("mean-field limit") and what kind of physics they describe. Various mathematical problems arising in this context are described. Examples of recent results are presented in some detail, and some ideas of proofs are sketched. The goal of this lecture is to convince analysts that it may be profitable to talk to physicists in order to find out what some of the interesting questions are.

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Wed, 09/26/2012 - 15:34

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terms:

- [School of Mathematics](#)