

# Oberseminar Analysis und Theoretische Physik

## Dr. David Stuart

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# Quantum Field Theory, Solitons and the Nonrelativistic Limit

I will first discuss the basic mathematical formulation of quantum field theory, and then explain the classical techniques developed for the analysis of relativistic quantum field theories in two dimensional space-time. Next I will define the soliton solutions in the corresponding classical theory (described mathematically by a nonlinear wave equation), and discuss their role in the dynamics. Finally the generalization of the classical techniques to provide an analysis of the nonrelativistic limit in the soliton sector of the quantum field theory will be presented.

Dienstag, 16.10.2018, 15:00 Uhr, Raum c311  
Hauptgebäude der Leibniz Universität

Dazu laden herzlich ein:

Prof. Dr. Wolfram Bauer, Prof. Dr. Joachim Escher,  
Prof. Dr. Elmar Schrohe, Prof. Dr. Christoph Walker