

# Mini Lecture Course

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## The Algebraic Bethe Ansatz

**8 Lectures: May 28, 29, 31 and June 3 - 7, 2013 / 10:00 - 11:00**

**at Erwin Schrödinger Lecture Hall**

### Scope:

- Classical and quantum Inverse scattering method.
- The Sine-Gordon model and Nonlinear Schroedinger equations.
- The Algebraic Bethe Ansatz for XXX and XXZ Heisenberg spin chains.
- The Algebraic Bethe Ansatz for the XYZ model.
- The Algebraic Bethe Ansatz for the t-J model with open/periodic boundary condition.
- The Algebraic Bethe Ansatz for the Hubbard model with open/periodic boundary conditions.

### Literature:

- Book “Quantum Inverse Scattering Method and Correlation Functions” by V. E. Korepin, Cambridge Univ. Press

Joachim Schwermer

April 29, 2013