



**UNIVERSITÄT
BIELEFELD**



Faculty of Physics

Seminar

Theoretische Physik—Theorie der kondensierten Materie

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Integrable Models - Methods and Results

I will develop at the example of the spin-1/2 XXZ quantum spin chain the methods for investigating the exact thermodynamics. I will avoid the use of TBA (thermodynamical Bethe ansatz). Instead finite sets of non-linear integral equations will be derived. The results comprise the thermodynamical potential and derived quantities, but also some correlation functions. A suitable continuum limit will yield the properties of atomic gases like the multicomponent Bose gas with deltafunction interaction. The problems occurring in the computation of correlation functions for models with $su(n)$ symmetry will be indicated.

Donnerstag, 27 May 2021, 14.00 Uhr MESZ

Zoom Konferenzschaltung— Please contact Jürgen Schnack
(jschnack@uni-bielefeld.de) for details regarding access