



量子物理学・ナノサイエンス第 34 回特別セミナー/  
第 47 回数理物理・物性基礎論セミナー

## **Nonlinear fluctuating hydrodynamics and time correlations for one-dimensional systems**

**講師** : Professor Herbert Spohn

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**日程** : 1 月 16 日 (月) 16:45-18:00

**場所** : 本館 1 階 H111 講義室

### **概 要**

One-dimensional systems might show anomalous transport. We discuss this phenomenon in the context of equilibrium time correlations for one-dimensional classical fluids and explain the connection to fluctuating Burgers equations with several components. As a novel mechanism, of particular importance for quantum spin chains, we discuss hydrodynamic fields which are almost conserved in a specific temperature range. Examples are classical spin chains and the discrete nonlinear Schroedinger equation.

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