



TRR 80 Sonderseminar

Am Dienstag, den 29. April um 16:00 Uhr

spricht

Prof. Dr. Alexander M. Finkelstein

**The Weizmann Institute of Science, Israel and
the Texas A&M University, USA**

über das Thema

***Metal-Insulator Transition in Disordered
Two-Dimensional Electron Systems***

(Anderson transition in the presence of electron-electron interactions)

I will discuss the current status of the Metal-Insulator Transition (MIT) observed in a two-dimensional electron gas. I will demonstrate that the scaling theory which takes into account the interplay of electron-electron interactions and disorder can comprehensively explain the observed properties of the MIT. Experimental measurements provide strong evidence in support of our theory. The experimentally obtained flow diagram clearly reveals the existence of a quantum critical point that separates the metallic phase from the insulating phase. Moreover, the metallic side of this diagram is accurately described by the renormalization-group theory without any fitting parameters.

Gäste sind herzlich willkommen.

Der Vortrag findet im Seminarraum S-288 / Institut für Physik, Universität Augsburg statt.

Gastgeber: Prof. Dr. Dieter Vollhardt

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