

PHYSIKALISCHES KOLLOQUIUM
EINLADUNG

15.11.2011/Wh

Am Montag, dem 21.11.2011, 16.15 Uhr in W2-1-148

spricht

Prof. Dr. Antonio Politi
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über

„Heat conduction in classical one-dimensional systems“

The problem of providing a microscopic foundation to the Fourier law is more than two centuries old, but it has not yet been fully clarified. It is only a few years that the key elements of the general scenario in one-dimensional systems have been identified, but there are still some elements of uncertainty in generic models.

Altogether, it has nevertheless been established that in the absence of external forces, typical models exhibit anomalous (diverging) conductivity in the thermodynamic limit. This theoretical prediction has been recently confirmed in careful experiments with carbon nanotubes.

All the key steps towards the current understanding of the problem will be reviewed.

Einladende: Ulrike Feudel