



# TRR 80 Sonderseminar

Am Dienstag, den 25. Oktober um 16:00 Uhr

spricht

***Prof. Dr. Jean-Louis Pichard***

**Service de Physique de l'État Condensé, CEA Saclay**

über das Thema

***Thermoelectric transport in one dimensional MOSFETs***

We describe thermoelectric transport in disordered nanowires in the field effect transistor device configuration. We consider the elastic coherent regime characterizing low temperatures and the inelastic activated regime occurring at higher temperatures. The thermoelectric performances are studied as a function of the location of the Fermi level inside the nanowire conduction band. We evaluate the performances of large array of parallel nanowires for thermoelectric energy conversion. We underline the interest of such devices for managing heat at sub-micron scales, when electronic transport is dominated by phonon assisted hops between localized states.

Gäste sind herzlich willkommen.

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

Gastgeber: Prof. Dr. Ulrich Eckern  
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