Halbleiterphysik Tagesübersichten

## HL 47 Hauptvortrag Samuelson

Zeit: Dienstag 10:00–10:45 Raum: TU P270

Hauptvortrag

 ${\rm HL}\ 47.1\ {\rm Di}\ 10:00\ \ {\rm TU}\ {\rm P270}$ 

Physics and quantum device applications of semiconductor nanowires — ◆LARS SAMUELSON — Lund University, Solid State Physics/the Nanometer Structure Consortium,Box 118, S-221 00 Lund, Sweden

Self-assembly of low-dimensional semiconductor materials and devices via seeded growth of semiconductor nanowires, is presently in the focus of much attention. The possibility to control formation of heterostructure interfaces within nanowires, with control on the atomic scale, has allowed ideal 1D and 0D semiconductor systems to be formed. I will describe recent progress in materials science, in the physics of nanowires as well as in demonstrated quantum devices.