

Method tags: Theory

Scientific tags: Quantum physics, Quantum technology, Quantum information, Low-temperature transport, Nanothermodynamics

Supervisor: Peter Samuelsson, peter.samuelsson@teorfys.lu.se

Website: <a href="https://www.nano.lu.se/mesoscopic-physics-group">https://www.nano.lu.se/mesoscopic-physics-group</a>

https://portal.research.lu.se/sv/persons/peter-samuelsson

In the Mesoscopic Physics Group, we are working towards a better understanding of nanoscale systems, where phase coherence meets fluctuations. Our goal thereby is to accelerate and contribute to the development of quantum technologies which make use of intriguing quantum features such as coherence and entanglement. Examples of research topics include quantum thermodynamics in mesoscopic and nanoscale conductors, electronic entanglement, generation and detection in mesoscopic systems, and quantum transport in circuit quantum electrodynamic systems.