

# SKM-Symposium Spincaloric Transport (SKM-SYST)

jointly organized by  
the Magnetism Division (MA),  
the Semiconductor Physics Division (HL), and  
and the Low Temperature Physics Division (TT)

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The application of temperature gradients to homogeneous ferromagnets or magnetic/nonmagnetic nanostructures gives rise to novel spin dependent phenomena. Prominent examples are the spin Seebeck effect reported for metallic, insulating and semiconducting ferromagnets, or the thermally induced spin transfer torque in nanopillar devices. Both theory and experiments suggest that spin caloric effects can substantially alter the thermal transport properties, the magneto-galvanic (magneto-resistive) response, and possibly even the magnetic configuration of magnetic materials. Technical applications might include improved heat management in spintronic devices and nanoscale heat engines. The symposium provides an overview over this emerging research field.

## Overview of Invited Talks and Sessions

(lecture room TRE Ma)

### Invited Talks

SKM-SYST 1.1	Mon	14:30–15:00	TRE Ma	<b>On the theory of the spin wave Seebeck effect</b> — ●GERRIT BAUER
SKM-SYST 1.2	Mon	15:00–15:30	TRE Ma	<b>Spin Seebeck effect in metals and insulators</b> — ●KEN-ICHI UCHIDA, EIJI SAITOH
SKM-SYST 1.3	Mon	15:30–16:00	TRE Ma	<b>Spin-Seebeck effect: Local nature of thermally induced spin currents in GaMnAs</b> — ●ROBERTO MYERS
SKM-SYST 1.4	Mon	16:00–16:30	TRE Ma	<b>Heat conduction of low-dimensional quantum magnets</b> — ●CHRISTIAN HESS, NIKOLAI HLUBEK, PATRICK RIBEIRO, BERND BÜCHNER, SURJEET SINGH, ROMUALD SAINT-MARTIN, ALEXANDRE REVCOLEVSKI
SKM-SYST 1.5	Mon	16:30–17:00	TRE Ma	<b>Evidence of spin polarized heat current acting on magnetization</b> — ●JEAN-PHILIPPE ANSERMET

### Sessions

SKM-SYST 1.1–1.5	Mon	14:30–17:00	TRE Ma	<b>Spin Caloric Transport</b>
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