

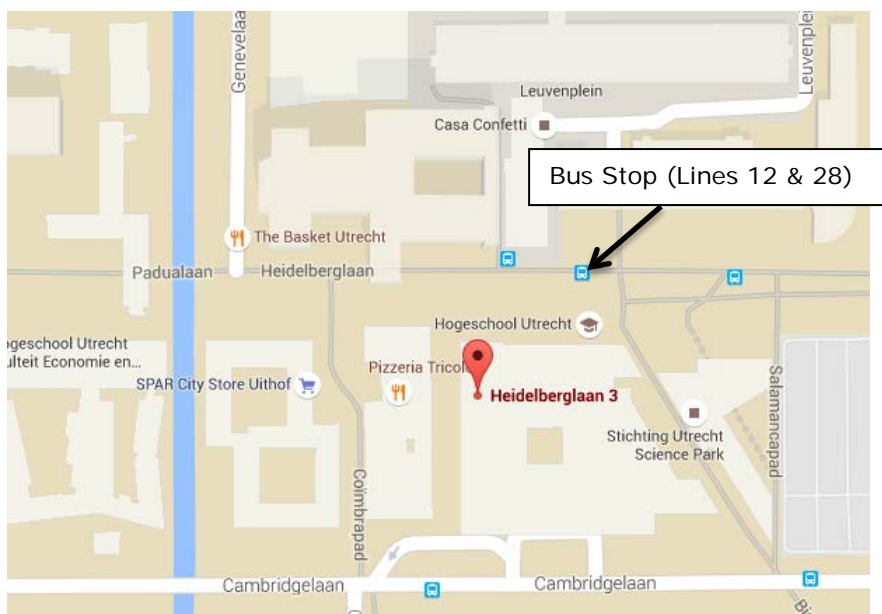
## NEWSPIN4: Transport Beyond Electrons

Utrecht, December 14-16, 2015

**Conference venue:** Cornelis Booth Lecture Hall, University Library, Utrecht University Campus. Address: Heidelberglaan 3, 3584 CS Utrecht, The Netherlands



<https://goo.gl/maps/bFzh29V2xmo>



The Boothzaal can be easily reached by bus line 12 (from Utrecht Central Station) or line 28 (Utrecht City Center or Hotel Mitland)

**The conference dinner** (Tuesday 15 December, 18h00) will take place in Restaurant Oudaen, the 13<sup>th</sup> century City Castle (<http://www.oudaen.nl/>), Oudegracht 99, Utrecht, in the City Center. From the Boothzaal you can take bus 28 to the Neude busstop.



**Lunches** will be served in the Educatorium restaurant, famously designed by Rem Koolhaas, across the street from the Boothzaal. Participants will receive lunch tickets to collect their lunches. There will be reserved tables for the conference participants.

## NEWSPIN4 program

### Morning sessions

	Monday 14/12/2015	Tuesday 15/12/2015	Wednesday 16/12/2015
Session theme	<i>Mesoscopics/graphene/topological insulators</i>	<i>Phonons, magnons and coupled spin-heat transport</i>	<i>Correlated matter and AdS/CFT</i>
<b>09:30-10:10</b>	<b>Laurens Molenkamp</b>	<b>Ludo Cornelissen</b>	<b>Dirk van der Marel</b>
	<i>Topological Superconductivity in HgTe-based Devices</i>	<i>Exchange magnon spintronics: Diffusive spin currents in a magnetic insulator</i>	<i>Viscosity in Electron Liquids</i>
<b>10:10-10:50</b>	<b>Vladimir Juricic</b>	<b>Fabian Heidrich-Meisner</b>	<b>Joe Bhaseen</b>
	<i>Space group classification of topological insulators and lattice dislocation modes</i>	<i>Spin transport in quantum magnets</i>	<i>Holographic Approaches to Quantum Transport</i>
<b>10:50-11:20</b>	<b>COFFEE BREAK</b>	<b>COFFEE BREAK</b>	<b>COFFEE BREAK</b>
<b>11:20-12:00</b>	<b>Ivan Protopopov</b>	<b>Maarten Wegewijs</b>	<b>Vivian Jacobs</b>
	<i>Bose-Fermi duality in coherent dynamics and relaxation in dispersive Luttinger liquids</i>	<i>Heat current relaxation in interacting quantum dots: surprises and a new duality</i>	<i>Conductivity of interacting Dirac and Weyl semimetals from holography</i>
<b>12:00-12:40</b>	<b>Michael Wimmer</b>	<b>Mikhail Titov</b>	<b>Jan Zaanen</b>
	<i>Quantum Spin Hall insulators in in-plane magnetic fields</i>	<i>Anomalous Hall effect due to skew scattering on rare impurity configurations</i>	<i>Strange metals, entanglement and black holes</i>
<b>12.40-14.00</b>	<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH /Goodbye</b>

### Afternoon sessions

	Monday 14/12/2015		Tuesday 15/12/2015
Session theme	<i>Low-dimensional systems</i>		<i>Ultracold atoms</i>
<b>14:00-14:40</b>	<b>Christoph Stampfer</b>	<b>14:00-14:40</b>	<b>Tilman Esslinger</b>
	<i>Coupling of Vibrations to Spin States in Carbon-Nanotube Quantum Dots</i>		<i>Quantum Simulation of a Point Contact</i>
<b>14:40-15:20</b>	<b>Rianne van den Berg</b>	<b>14:40-15:20</b>	<b>Ludwig Mathey</b>
	<i>Atomic Spin Chain Realization of a Model for Quantum Criticality</i>		<i>Probing superfluidity via laser stirring</i>
<b>15:20-16:40</b>	<b>COFFEE/POSTER SESSION</b>	<b>15:20-15:50</b>	<b>COFFEE BREAK</b>
<b>16:40-17:20</b>	<b>Tero Heikkilä</b>	<b>15:50-16:30</b>	<b>Austen Lamacraft</b>
	<i>Coupling charge, spin and heat transport in superconductors with a spin splitting field</i>		<i>Persistent currents in ferromagnetic condensates</i>
<b>17:20-18:00</b>	<b>Jürgen König</b>	<b>16:30-17:10</b>	<b>Carlos Sa de Melo</b>
	<i>Quantum-Dot Spintronics</i>		<i>Effects of spin-orbit on the BKT transition and the vortex-antivortex structure in 2D Fermi gases</i>
		<b>18:00</b>	<b>Conference Dinner</b>