

**SFB - FOQUS 14./15. December 2017**

Donnerstag, 14. Dezember 2017	Freitag, 15. Dezember 2017
	08:30 - 09:30 Board Meeting
	09:30 - 10:10 <b>Rudolf Gross</b> , Walther-Meißner-Institut
	<i>Superconducting Quantum Circuits: Basic Science Pushes Technology</i>
	10:20 – 10:40 <b>Jason Hoelscher Obermaier</b> , University of Vienna
	<i>Quantum entanglement in cavity optomechanics</i>
	10:45 - 11:05 <b>Lee Rozema</b> , University of Vienna
	<i>Experimental Entanglement of Causal Orders</i>
	<b>11:10 – 11:45 Coffee</b>
	11:45 - 12:05 <b>Marie-Christine Röhsner</b> , University of Vienna
	<i>Quantum advantage for probabilistic one-time programs</i>
12:10 - 12:30 <b>Mariona Moreno-Cardoner</b> , (ICFO) guest - University of Innsbruck	
	<i>Non-Linear Two-Dimensional Atomic Mirrors</i>
	12:35 - 12:55 <b>Esteban Castro Ruiz</b> , University of Vienna
12:00 - 12:45 SFB Registration	<i>Dynamics of Quantum Causal Structures</i>
13:00 - 13:40 <b>Thomas Konrad</b> , University of KwaZulu Natal	<b>13:00 Departure</b>
<i>Quantum Control through a Self-Fulfilling Prophecy</i>	
13:50 - 14:10 <b>Stefan Ostermann</b> , University of Innsbruck	
<i>Emergent Skyrmions in a two-component Bose-Einstein condensate in a ring cavity</i>	
14:15 - 14:35 <b>Marc-Antoine Lemonde</b> , TU Wien	
<i>Phonon networks with SiV centers in diamond waveguides</i>	
14:40 - 15:00 <b>Phani Mupalla</b> , University of Innsbruck	
<i>Bi-stability in a mesoscopic Josephson Junction Array Resonator</i>	
<b>15:05 – 15:45 Coffee</b>	
15:45 - 16:25 <b>Vlatko Vedral</b> , University of Oxford & University of Singapore	
<i>An entanglement-based test of quantum gravity</i>	
16:35 - 16:55 <b>Bernhard Rauer</b> , TU Wien	
<i>Recurrences in an isolated quantum many-body system</i>	
17:00 - 17:20 <b>Simon Stellmer</b> , TU Wien	
<i>Ultracold mercury for a measurement of the EDM</i>	
17:25 - 17:45 <b>Christian Brand</b> , University of Vienna	
<i>In search of multi-path interference using large molecules</i>	
17:50 - 18:10 <b>Cornelis Ravensbergen</b> , University of Innsbruck	
<i>Precise determination of the dynamical polarizability of dysprosium at 1064 nm</i>	
<b>19:00 - 22:00 Dinner</b>	