

Bad Honnef Physics School „Gauge Theory and Topological Quantum Matter“

September 16-21, 2018, Physikzentrum Bad Honnef, Germany

<i>Time</i>	<i>Sunday Sept 16</i>	<i>Monday Sept 17</i>	<i>Tuesday Sept 18</i>	<i>Wednesday Sept 19</i>	<i>Thursday Sept 20</i>	<i>Friday Sept 21</i>	
08:00	Arrival	Breakfast					
09:00 – 10:30		M. Zirnbauer Quantum mechanics and the gauge principle I	M. Zirnbauer Quantum mechanics and the gauge principle II	J. Fröhlich Gauge theory of nonrelativistic condensed matter II	P. Teichner Invertible topological field theories and SPT phases	P. Teichner Invertible topological field theories and SPT phases	
10:30		Break					
11:00 – 12:30		S. Ryu Symmetry protected topological phases I	J. Fröhlich Gauge theory of nonrelativistic condensed matter I	S. Ryu Symmetry protected topological phases II	S. Ryu Symmetry protected topological phases III	J. Fröhlich Gauge theory of nonrelativistic condensed matter III	
12:30		Lunch					
14:30 – 16:00		Exercises (45 min) J. Schmalian Anderson-Higgs mechanism for superconductors I	Exercises (45 min) J. Schmalian Anderson-Higgs mechanism for superconductors II	Excursion	Exercises (30 min) G. Panati Gauge fields from adiabatic limits	End of School	
16:00		Break			Break		
16:30 – 18:00		Short Contributed Talks (3 x 15 min) N. Schuch Tensor networks (PEPS) for chiral topological states	K. Everschor-Sitte Emergent electrodynamics for magnetic skyrmions		K. Gawedzki Wess-Zumino amplitudes and topological insulators A. Aldridge Operator K-theory for topological insulators with disorder		
18:30		Dinner					
20:00 –				Poster Session	Short Contributed Talks (6 x 15 min)		