

Syed Raza

CONTACT INFORMATION	475 Seymour Road, Apt 8, Charlottesville, Virginia.	Phone: (+1) 434-326-8203 E-mail: raza@virginia.edu Webpage: https://saliraza.weebly.com
RESEARCH INTERESTS	I am a theoretical condensed matter physicist. My research focuses on topological phases of matter and quantum computation. I am also interested in the applications of mathematical modeling, data science and machine learning to real world problems.	
EDUCATION	University of Virginia , Charlottesville, USA PhD Physics Advisor: Jeffrey Teo LUMS, School of Science and Engineering , Lahore, Pakistan BS Physics Advisor: Pervez Hoodbhoy	Aug 2013-present Aug 2008-2012
EMPLOYMENT	University of Virginia , Charlottesville, USA Graduate Research Assistant LUMS, School of Science and Engineering , Lahore, Pakistan Research Assistant	Aug 2015-present July 2012-July 2013
HONORS AND AWARDS	Winner UVA Physics Research Poster Competition 2016 Babar Ali Foundation Scholarship (PKR 1.7 million), 2008-2012 Best Poster Award, Mathematics Summer Research Program, LUMS, 2010 Dean's Honour List, LUMS, 2009-2010 Awards of Distinction in Physics, Chemistry and Mathematics in A-levels, LGS, 2008 Brainwave Scrabble Champion, 2008	
PUBLICATIONS	Raza, S. , Sirota, A., Teo, J. (2017) From Dirac semimetals to topological phases in three dimensions: a coupled wire construction. <i>In review</i> arXiv:1711.05746 Raza, S. , Teo, J. Non-abelian knot cycles in 3+1 dimensions. (<i>In preparation</i>) Hua, M., Raza, S. , Teo, J. Classification of magnetic topological crystalline insulators. (<i>In preparation</i>) Raza, S. , Bukhari, Veljee, Baig (2011) Water Management in Ayubia National Park, ICWREM.	
PROGRAMMING SKILLS	Proficient in Mathematica, Matlab, C++, Python	

TEACHING

Physics 2419 - Summer 2016, 2017 Spring 2016,2017, Fall 2013
Physics 2030 - Summer 2015, Fall 2014
Physics 2040 - Spring 2015
Physics 1429 - Spring 2014

WORKSHOPS AND
CONFERENCES

Strongly Correlated Topological Phases of Matter, Simons Center, Stony Brook NY - June 2017
APS March Meeting, New Orleans LA - March 2017
Introduction to topological phases of matter, ICMT UIUC - 2016
Advances in strongly correlated materials, FTPI Minnesota - 2016
APS March meeting, Baltimore MD - March 2016
Prospects in Theoretical Physics, Institute for Advanced Study, Princeton - 2015
Princeton Summer School on Condensed Matter Physics, Princeton University - 2015
Summer School on Emergent Phenomena in Quantum Materials, Cornell University - 2015 and 2017
APS March Meeting, San Antonio TX - March 2015

TALKS

'Symmetry-preserving gapping of Weyl and Dirac Semimetals' UVA April 2017
'Non-Abelian knot Cycles in 3+1 dimensions' March meeting 2017
'Symmetry-preserving gapping of Weyl and Dirac semimetals' UIUC June 2016
'Coupled wire construction of Weyl and Dirac semimetals' March meeting 2016