Curriculum Vitae

PERSONAL INFORMATION

NAME: Shan Zhou
GENDER: Male
DATE OF BIRTH: Oct. 31, 1995

Address: Tsinghua University, Beijing, China Education: Fourth-year Undergraduate

EMAIL: Tsinghua University: zhous14@mails.tsinghua.edu.cn (expires in July 2018)

University of Michigan: zhoushan@umich.edu (expires soon)

PERSONAL WEBSITE: shanzhou.xyz/about (please check my website for the latest CV)

RESEARCH INTERESTS

String theory and mathematical physics. I have an open mind on pure mathematics.

RESEARCH EXPERIENCE

Current OCT 2017	Yau Mathematical Sciences Center, Tsinghua University Holographic Entanglement Entropy (Bachelor's Thesis), ADVISOR: Wei Song
Current FEB 2017	Department of Physics, University of Michigan String Theory, Advisor: Leopoldo Pando Zayas and James Liu
Jan 2017 Aug 2016	Institute for Advanced Study, Tsinghua University Condensed Matter Theory, ADVISOR: Zhengyu Weng
JUL 2016 Nov 2015	Center for Quantum Information, Tsinghua University Quantum Information & Condensed Matter Theory, Advisor: Alioscia Hamma
Nov 2015 Apr 2015	Center for Quantum Information, Tsinghua University Quantum Information Theory, ADVISOR: Xiongfeng Ma

PUBLICATION

Xiao Yuan, Quanxin Mei, <u>Shan Zhou</u>, and Xiongfeng Ma, <u>Reliable and robust entanglement witness</u>, Phys. Rev. A **93**, 042317 - Published 12 April 2016 James T. Liu, Leopoldo A. Pando Zayas and <u>Shan Zhou</u>, <u>Comments on Higher Rank Wilson Loops in $\mathcal{N}=2^*$, arXiv: 1708.06288 - Submitted to JHEP</u>

EDUCATION

Jun 2017	Undergraduate Visiting Student: Department of Physics, University of Michigan, Ann Arbor, MI, USA
FEB 2017	University of Michigan, Ann Arbor, MI, USA
Jan 2017	WINTER SCHOOL: UTS Quantum Computer Science School, University of Technology Sydney, Sydney, Australia
Jan 2017	University of Technology Sydney, Sydney, Australia
Current	UNDERGRADUATE: Yao Class, Institute for Interdisciplinary Information Sciences,
AUG 2014	Tsinghua University, Beijing, China

RELATED COURSES¹

Type	Instructor	Course Title	Grade	Year-Semester
GRAD	Mircea Trif	Advanced Quantum Statistical Mechanics		2017 Fall
$YMSC^2$	Si Li	Supersymmetry	N/A	2017 Fall
UGRD	Longbo Huang	Research Immersion Training	96	2017 Summer
UGRD	Xiongfeng Ma	Quantum Information	100	2016 Fall
UGRD	Liwei Wang	Machine Learning	94	2016 Fall
GRAD	Hongjian He	Quantum Field Theory	86	2016 Fall
GRAD	Hui Ma	Differential Manifolds	96	2016 Fall
$YMSC^2$	Wenxuan Lu	Differential Geometry in Mathematical Physics	N/A	2016 Fall
UGRD	Xiongfeng Ma	Students Research Training	98	2016 Fall ³
UGRD	Alioscia Hamma	Physics of Financial Markets	100	2016 Spring
GRAD	Kahwan Kim	Advanced Quantum Information Theory	99	2016 Spring
UGRD	Man-hong Yung	Modern Physics (2) ⁴	85 ⁵	2015 Fall
UGRD	Luyan Sun	General Physics (2)(in English) ⁶	91	2015 Fall
GRAD	Huaiyu Wang	Mathematical Methods in Physics	91	2015 Fall
UGRD	Mile Gu	The Physics of Information	100	2015 Summer
UGRD	Xiaofeng Wang	Probability and Statistics	100	2015 Spring
UGRD	Alioscia Hamma	General Physics (1)(in English) ⁷	100	2015 Spring

SCHOLARSHIPS

Nov 2017	Academic Excellence Award - Friend of Tsinghua, Evergrande Group Scholarship (¥5,000)
Nov 2017	Scholarship for XueTang Class (¥5,000)
SEP 2017	Yao Award - Recognition Prize
Nov 2016	Scholarship for Xuetang Class (¥5,000)
Nov 2015	Research Progress Award(¥1,000)
Nov 2015	Academic Excellence Award - Friend of Tsinghua, Baidu Scholar First-Class Scholarship(¥3,000)
Nov 2015	Scholarship for Xuetang Class (¥5,000)
Nov 2014	Scholarship for Xuetang Class (¥5,000)

Honors

MAY 2016 Member of "Spark" Innovative Talent Cultivation Program for Students of Tsinghua University
SEP 2014 Member of Tsinghua Xuetang Talents Program (Yao Class)

LANGUAGES

CHINESE: Mothertongue

ENGLISH: Fluent (GRE general test: 155+170+4.0; TOEFL iBT: 100)

COMPUTER SKILLS

Programming Languages: Mathematica, C/C++, Java, MATLAB

¹Only related courses are listed, e.g. most computer science courses, elementary-level math courses (calculus, linear algebra) are skipped.

²Provided by Yau Mathematical Sciences Center and independent of the usual course registration system, so there is no grading.

³It is about quantum entanglement witness, see Research Experience and Publication. It is already finished at the end of 2015, when we put the paper on arXiv, but it takes some time for the paper to be accepted.

⁴Quantum mechanics (following Sakurai's Modern Quantum Mechanics) and statistical physics.

⁵Rank 1st

⁶Electromagnetics (following Feynman's lectures on physics vol.2) and relativity.

⁷Classical mechanics (following Landau's *Mechanics* and Arnold's *Mathematical Methods of Classical Mechanics*) and thermodynamics.