# Peijun Zhu

### CURRICULUM VITAE

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#### Education

09/16–Now **PhD Program, Physics**, *University of Pittsburgh*, Pittsburgh, PA, GPA 3.964/4.0.

o Ranked 1st in the entry examination

09/12–06/16 **B.S. Physics**, *University of Science and Technology of China*, Hefei.

- Graduated with *hornor* from Yan Jici Talent Program in Physics
- o GPA 3.91/4.3 and ranked top 5% for 3 years
- Final GPA 3.75/4.3 because of busy Grad school application at last year

## Research & Teaching Experience

10/16-03/17

Advisor: Roger Mong, Topological Phase Matter, PITT, aa.

- Learned the theory of one way quantum computer and anyons
- o Using numerical Density Matrix Renormalization Group method to calclate the ground states of spin systems

Fall 2016

**Teacher: Donna Naples**, Teaching Assistant for Physic Lab, PITT.

02/16-06/16

**Advisor: Youjin Deng**, Percolation Model, USTC.

- Developed an program based on graph algorithm to distinguish different types of bonds in a percolation cluster
- o Analysed the fractal behaviour of leaf-free/bridge-free clusters based on the data of Monte-Carol Simlulation
- o Computed the wrapping probability of large scale lattice at high accuracy on Computing
- o Moreover, classified wrapping of clusters on torus by topology, and analysed the probability for different types of wrapping.

07/15-09/15

Advisor: Xiaoming Mao, Soft Condensed Matter, University of Michigan.

- o Developed a algorithm using computational geometry to compute the depletion potential between of 2D colloidal particles dominated by
- o Designed various kinds of colloids and analysed their self-assembly behavior
- o Numerically simulated the resonance of mechanical diode analysed its transmission property of energy.

04/15-06/15

**Advisor: Wenge Wang**, (NPW) Nonperturbative Part Width of Band Matrices, USTC.

- Theoretically analysed the trend of NPW in the limit of strong perturbation
- o Developed an accurate & efficient algorithm to compute the width of NPT parts

#### Standardized Tests

**TOEFL** 

100 Total = 28 Reading + 26 Listening + 19 Speaking + 27 Writing

**GRE General** 

158 Verbal + 170 Quantitive + 3.0 Analytical Writing

**GRE Physics** 

Scaled Score 990, 94% Below

Honors and Awards

2017	PITT Kenneth P. Dietrich School of Arts & Sciences Fellowship for spring term
2015	Third Grade Outstanding Students Scholarship
2015	First Grade Prize in Physical Research Oriented Experiment Competition of USTC
2014	Second Grade Outstanding Students Scholarship
2013	First Grade Outstanding Students Scholarship
2013	Admitted by Yan Jici Talented Students Program in Physics
2012	Cyrus Tang Scholarship
2012	First Grade Outstanding Freshman Scholarship
2011	First Grade Prize in 28th CPhO (Chinese Physics Olympiad), Jiangxi Province

# — Computer Skills

C/C++, Python, Linux, LaTeX