

Hongxiang Chen

Curriculum Vitae

No 1088, Xueyuan Rd., Xili, Nanshan District,
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📄 <http://github.com/we-taper/me/>

👤 [we-taper](#)

Education

2014–2017 **Masters of Science in Physics**, *Southern University of Science and Technology of China (SUSTech)*.

Shenzhen, Guangdong, China.

2011–2013 **High School**, *Guangzhou Tieyi Middle School*.

Guangzhou, Guangdong, China.

Research

Interests

Topology ◦ Condensed Matter Theory ◦ Statistical Physics ◦ Biophysics

Bachelor Thesis

Title *Classification of Topological Insulators (in progress)*

Supervisor Assistant Professor Wu Jiansheng

I will try to explore different ways of classifying topological insulators.

Undergraduate Research

Topic Mechanical Analogy of Topological Insulator

- Calculates the eigenmodes of oscillation on a honeycomb lattices with/without the presence of Coriolis force
- Examines its symmetry using the analogy of quantum symmetries.
- Tries to simulate the lattice using 3D-printed objects.

Physics Beyond Usual Curriculum

Conversant Topological Insulators and Superconductors, Abstract Algebra, Advanced Linear Algebra

Experienced Solid State Theory, (Real) Differential Geometry, Complex Geometry, Sheaf Cohomology

Acquainted Quantum Many-body Theory, Discrete Mathematics

Seminars Attended

Topic Topological Insulators and Superconductors

Reference Topological Insulators and Topological Superconductors by B. Andrei Bernevig
book

Computer skills

Conversant JAVA, MATLAB, \LaTeX , Vim
Intermediate PYTHON, Linux System Administration
Basic RUBY, BASH

Communication Skills

- o Good presentation skill
- o Being leader of the philosophical society's debate team.

Languages

Chinese Mother tongue
English Fluent
Deutsch Basic

TOEFL score: 112
Basic words and phrases only

Awards

2014-2017 College Start-up Scholarship, CNY 24,000 *SUSTech*
2016 Excellent Student Scholarship, CNY 1,500 *SUSTech*
2015 Second Place in Debating Competition *Student Debating Union, SUSTech*

Hobbies

Classical Music Though all genres are welcome, I particularly favor *Symphony No.5* by Beethoven and most works of *Joe Hisaishi*.
Handicrafts Fond of making things. My favorites the LEGO toys and Zhezhi (also called Origami by the Japanese)

Social Connections

I am often nicknamed we.taper or just taper on the Internet.

Github Page <http://www.github.com/we-taper/>
Physics StackExchange <http://physics.stackexchange.com/users/45384>
My Notes <https://github.com/we-taper/Draft/> *A "peep" into my life. There is no worry because everything is copylefted!*
VexDB <https://goo.gl/tR16Mr> *My high school VEX Robotics team information on VexDB*

Miscellaneous Activities

poster presentations

December **My Panopticon.**
2014 English Class: SUSTech.
Talks about the growing threat posed by Internet of Things (IoT)

- January **A Review On Carbon Nanotube.**
2014 General Chemistry Class: SUSTech.
About the Carbon nanotubes: what are they, what is its property, how it is produced and how can it be used as semiconductors.
- November **Advances in Origami.**
2013 English Class: SUSTech.
Introduced about the new role of computer technology, more specifically, the program TreeMaker by Robert J. Lang.
- 2013 **Caring for primary school children.**
SUSTech Volunteer Association
- October 2011 **Asia-Pacific Robotics Championship China Qualifier - High School.**
Taipei Yong-Le Elementary School