# Changyuan Lyu | Curriculum Vitae

### Education

B.S candidate, **Physics** Sept. 2012 - July 2016 (Expecting) Kuang Yaming Honors School, Nanjing University, China

GPA: 4.541/5.0Ranking: 9/81

#### **Publication**

**Changyuan Lyu**, Luyan Yu, Shengjun Wu. *Localization in Quantum Walks on a Honeycomb Network*. arXiv: 1509.03919

Accepted by **Physical Review A** 

# **Academic Experiences**

## **Undergraduate Research Training Programs**

Supervisor: Prof. Shengjun Wu current, from Aug. 2014

- Project: Characteristics of Quantum Walks on Different Lattices
- Properties of quantum walks were investigated and strong localization in Grover walks on hexagonal lattices were rigorously discussed. Numerical simulations supported analytical calculations.
- Innovative research methods were further applied to more models and helped find a mistake in previous literature, which was confirmed by authors via private communication.
- The corresponding paper has been accepted by PRA. »
- Project: Multi-walker Quantum Walks with Weak Measurements
  - We try studying wave functions for quantum walks with multiple particles and irregular position spaces.
  - Weak measurements may be utilized to extract information without largely impacting wave functions.

#### **Academic Involvements**

Supervisor: Prof. Guojun Jin current, from Jan. 2014

Theme: Condensed Matter Theories

• I take part in weekly group meetings and participate in discussions actively, learning research frontiers, as well as the newest concepts and breakthroughs in condensed matter.

#### **Short-term Exchanges and Visitings**

Summer Workshop by the Faculty of Engineering early July 2015

The Chinese University of Hong Kong

Visting to Duke University late Aug. 2015

Kuang Yaming Honors School

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#### **Awards**

**Meritorious Winner** Apr. 2014 Mathematical Contest in Modeling, *COMAP* 

#### Selected Honors

#### People's Scholarship

Nanjing University, 2013

#### the CMB Scholarship

China Merchants Bank, 2014

## the Scholarship for Outstanding Students

Kuang Yaming Honors School, 2013&14

# Computer Skills

Basic HTML, CSS, Objective-C Proficient LATEX, Mathematica, C++, OS X & Linux

#### Standardized Tests

- TOEFL(iBT): 95, R27+L26+S20+W22
- GRE
  - General: V149+Q170+AW3.5
  - Subject-Physics:

#### **Excurricular Activities**

Technical Leader of Department Youth League July 2013 - June 2014

Social Practice: Investigation on bottled water July 2013

Tutor of a high school student

Feb.-June 2014