# Changyuan Lyu

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#### **EDUCATION**

Kuang Yaming Honors School, Nanjing University, China

Sept. 2012 - July 2016 (Expecting)

B.S. in Physics

Major GPA: 92.82/100

### RESEARCH INTERESTS

Quantum Information, Quantum Optics, Condensed Matter, Computational Physics

# **PUBLICATION**

• Changyuan Lyu, Luyan Yu, Shengjun Wu. Localization in Quantum Walks on a Honeycomb Network. Phys. Rev. A 95, 052305 (2015). arXiv: 1509.03919

#### **EXPERIENCE**

## **Undergraduate Research Training Programs**

Supervisor: Prof. Shengjun Wu

supported by the National Natural Science Foundation of China under Grants No. 11475084

• Project: Properties of Quantum Walks on Different Lattices

Sept. 2014 - Oct. 2015

- Characteristics of quantum walks were investigated and strong localization on hexagonal lattices was analytically discussed.
- Improved research methods were further applied to more models and helped find a mistake in previous literature, which was confirmed by authors after private communications.
- The corresponding paper was published on PRA.
- Project: Multi-walker Quantum Walks

Sept. 2015 - present

- studying wave functions for quantum walks with multiple particles and irregular position spaces.
- constructing modified models with Weak Measurements

#### **Academic Involvements**

Supervisor: Prof. Guojun Jin

Jan. 2014 - present

- Theme: Condensed Matter Theories
  - took part in weekly group meetings and participated in discussions
  - learned research frontiers, as well as the newest concepts and breakthroughs

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

• Summer Workshop by the Faculty of Engineering The Chinese University of Hong Kong Early July 2015

• Visting to Duke University Kuang Yaming Honors School Late Aug. 2015

#### **AWARDS & HONORS**

Meritorious Winner in Mathematical Contest in Modeling Outstanding Student

COMAP, Apr. 2014

Nanjing University, 2015

Zheng Gang Scholarship the CMB Scholarship People's Scholarship the Scholarship for Outstanding Students Nanjing University, 2015 China Merchants Bank, 2014 Nanjing University, 2013 Kuang Yaming Honors School, 2013,14,15

# **TECHNICAL STRENGTHS**

**Programming Languages** C++, Mathematica, Objective-C, HTML, CSS

Tools LATEX, Git, OS X & Linux Shell

# **EXCURRICULAR ACTIVITIES**

• Technical Leader of School Youth League July 2013 - June 2014

- offered supports for several school activities

- gave instructions to junior team members

• Social Practice: Investigation on Bottled Water July 2013

• Tutor of a high school student Feb.-June 2014

# STANDARDIZED TESTS

• GRE

- Physics: 990 (94%) Oct. 24, 2015

- General: V149+Q170+AW3.5 Oct. 17, 2015

• TOEFL(iBT): 95, R27+L26+S20+W22 Mar. 14, 2015