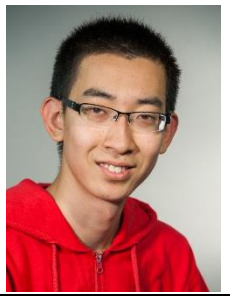
Department of Applied Physics
Stanford University
Spilker Building, Room 233
Stanford, CA 94305

Yijun Jiang

yijunj@stanford.edu
http://stanford.edu/~yijunj
Tel: (857) 400-6543



EDUCATION

Stanford University
Graduate student
- Sep. 2016 - current Department of Applied Physics

Massachusetts Institute of Technology GPA 5.0/5.0
Undergraduate class of 2016
- Sep. 2013 - Jul. 2016 Department of Physics
- Sep. 2014 - Jul. 2016 Double major in Department of Mathematics

Major courses
- Quantum Mechanics I, II, III, Statistical Physics I, II, Atomic and Optical Physics I, II, Experimental Physics I, II, Relativity, Physics of Solids, Theory of Solids.
- Algebra I, II, Differential Equations, Advanced PDE, Numerical Methods, Design and Analysis of Algorithms.

Peking University, China GPA 3.9/4.0
Studied as a freshman before transferring to MIT
- Sep. 2012 - Jul. 2013 School of Physics

Major courses
- Mechanics, Electromagnetics, Thermal Physics.
- Advanced Mathematics, Linear Algebra, Methods of Physical Mathematics, Data Structures and Algorithms.
- College Chemistry, College Biology.

RESEARCH

Ginzton Laboratory, Stanford University
- Jan. 2017 - current Prof. Jelena Vuckovic's group
  First year rotation in Department of Applied Physics. Worked with the "accelerator on a chip" (ACHIP) collaboration, in particular, on numerical simulation of waveguide-structured dielectric laser accelerator (DLA).
- Sep. 2016 - Dec. 2016 Prof. Tony Heinz's group
  First year rotation in Department of Applied Physics. Worked on strained transition metal dichalcogenides (TMDC).

MIT-Harvard Center for Ultracold Atoms, Cambridge, MA
- Jun. 2014 - Dec. 2015 Prof. Wolfgang Ketterle's BEC3 Group
  Worked on optical and electronic projects, including fiber coupling of high-power IR laser, beatlock of external cavity diode laser (ECDL) and homemade shutters out of hard drives, which helped the group achieve photoassociation, spectroscopy and high-field imaging of NaLi molecules.

Max Planck Institute for Solid State Research, Stuttgart, Germany
- Jun. 2015 - Aug. 2015 Prof. Ali Alavi's Group of Electronic Structure Theory
  Worked on understanding, visualizing and improving the initiator scheme in the i-FCIQMC algorithm, which provides an accurate description of the electronic ground state energy in a strongly correlated system.

Peking University, Beijing, China
- Sep. 2012 - Jul. 2013 Prof. Heng Fan's Group of Quantum Information Science
  Work focused on understanding the basics of quantum information science.

Dalian Jiaotong University, Dalian, China
- Sep. 2010 - Jul. 2012 Research Group of Environmental Functional Materials
  Work focused on performance studies of electromagnetic wave absorption materials.

AWARDS

Jan. 2013	Gold medal, 2nd World Physics Olympiad, Tangerang, Indonesia.
May 2013	Group 1st place, 2nd Physical Academic Competition of Peking University, Beijing, China.
Nov. 2012	Best Report, 13th Fulan Physics Tournament, Sun Yat-sen University, China.
Jul. 2012	Gold medal, 43rd International Physics Olympiad, Tallinn, Estonia.
Nov. 2011	Gold medal, 28th Chinese Physics Olympiad, Xi'an, China.
Nov. 2010	Gold medal, 27th Chinese Physics Olympiad, Xiamen, China.

PUBLICATIONS

1. Liqiu Wei, Ruxin Che, **Yijun Jiang**, Bing Yu, J. Environ. Sci. (China), **25** Suppl., 27 (2013).
2. Ruxin Che, **Yijun Jiang**, Liqiu Wei, Xiaona He, J. Therm. Anal. Calorim., **116**, 905 (2013).

PROGRAMMING & SIMULATION SKILLS

Knowledge in quantum Monte Carlo (QMC), as well as finite-difference time-domain and frequency-domain (FDTD & FDFD) algorithms. Experience in MATLAB and Python projects. Good mastery of C and Java.