

# Xiao Xue

Ph.D. Candidate in Physics (2nd year) Tsinghua University

## personal

Born Jan.1992  
Shandong Province  
China

## address

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github.io](http://xuexiao1992.github.io)

## languages

Chinese/English

## education

- since 2014 **Ph.D. Candidate in Physics, Tsinghua University** Beijing, P.R.China  
Center for Quantum Information,  
Institute for Interdisciplinary Information Sciences (IIIS)  
Majoring in Quantum Information Science
- Feb-June 2014 **Visiting Student, Tsinghua University** Beijing, P.R.China  
Center for Quantum Information,  
Institute for Interdisciplinary Information Sciences (IIIS)
- 2010–2014 **B.Sc. Degree in Applied Physics, University of Science and Technology of China (USTC)** Heifei, P.R.China  
School of Physics  
Majoried in Condensed Matter Physics

## research experience

- Aug 2014- **Ph.D. Research at Tsinghua supervised by Prof.Luming Duan&Dr.Yipu Song** see more  
**Gate-confined Quantum Dots in Graphene**  
*Fabricate single and double quantum dots in bilayer graphene*  
*Carry out Low-T measurement in dilution refrigerator*  
*Observe confinement in single quantum dot (Coulomb Blockade&Coulomb Diamond)*
- Feb-June 2014 **B.Sc. Thesis at Tsinghua supervised by Prof.Luming Duan** see more  
**Laser Filter in Quantum Memory with Cold Atoms**  
*Design a Fabry-Pérot Cavity as a laser filter and get better idler photons signal in background of strong reading laser*  
*Build an optical systems to get the saturated absorption spectroscopy of  $^{87}\text{Rb}$  atoms*  
*Participate to set up a commercial Magneto-Optical Trap (MOT) of  $^{87}\text{Rb}$  atoms*
- 2012-2013 **Research Assistant in USTC mentored by Prof.Chaoyang Lu** see more  
**Multi-Photon Entanglement**  
*Participate to build an system of entangled photon pairs generated by SPDC*  
*Study Theory of Quantum Computation and Quantum Measurement*

## experiment skills

Clean Room	<b>E-Beam Lithography, Photolithography, E-Beam Evaporation, Atomic Force Microscopy, Raman Spectroscopy, ICP, PECVD, Probe Station, Wire Bonder, Profilometer, Plasma Cleaning</b>
Low-T Tech	<b>Operation of Dilution Refrigerator</b>
Optics	<b>Building Optical Paths on Platform</b>

## computer skills

Programming	<b>C, MATLAB, Mathematica, GitHub</b>
Data&Simulation	<b>COMSOL, Origin, R</b>
Machine Drawing	<b>AutoCAD, Solidworks</b>
Document&Website	<b>HTML, CSS, JavaScript, L<sup>A</sup>T<sub>E</sub>X, Photoshop</b>

## scholarships

2014-2019	<b>5-Year Scholarship for Ph.D. Student of Tsinghua Univ.</b>
2012	<b>USTC Outstanding Student Scholarship (Grade 2, top 10% annually)</b>
2011	<b>USTC Outstanding Student Scholarship (Grade 3, top 20% annually)</b>

## standardized test

GRE	<b>Verbal: 149 Quantitative: 164 Analytical Writing: 3.5</b>
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## interests

Tennis, Ping-Pong, Badminton, Cycling, Mountaineering  
Programming, History of Science