

# Xiao Xue

Prospective Student from China

## personal

Born Jan.1992  
Shandong Province  
China

## address

EPFL-SB-IPHYS-  
LPQM  
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CH-1015 Lausanne  
Switzerland

## contact

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## languages

Chinese/English

## education

- Aug.2016- Internship, **École Polytechnique Fédérale de Lausanne** Lausanne, Switzerland  
Institute of Physics  
Research Intern in Cavity Quantum Optomechanics
- 2014-2016 Graduate Study, **Tsinghua University** Beijing, P.R.China  
Center for Quantum Information,  
Institute for Interdisciplinary Information Sciences (IIIS)  
Research 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)** Hefei, P.R.China  
School of Physics  
Majoried in Condensed Matter Physics

## previous research experience

- 2014-2016 **Research Assistant at Tsinghua**  
*supervised by Prof.Luming Duan&Dr.Yipu Song*  
**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*  
**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*  
**Multi-Photon Entanglement**  
  
*Participate to build a 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 Systems on Platform</b>

## computer skills

Programming	<b>C, Python, MATLAB, Mathematica, GitHub</b>
Data&Simulation	<b>COMSOL, Sonnet, Origin, R</b>
Machine Drawing	<b>AutoCAD, Solidworks</b>
Document&Website	<b>HTML, CSS, JavaScript, <math>\text{\LaTeX}</math>, Photoshop</b>

## publication

2016	<b>Coulomb oscillations in a gate-controlled few-layer graphene quantum dot</b> Nano Letters 16.10 (2016)
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## scholarships

2012	<b>USTC Outstanding Student Scholarship (Grade 2, top 10% annually)</b>
2011	<b>USTC Outstanding Student Scholarship (Grade 3, top 20% annually)</b>

## interests

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