

# Xiaoyu SUN

---

## PERSONAL INFORMATION



Email	xiaoyu.sun@lis-lab.fr	sunxiaoyu9811@gmail.com
Phone	+33 0778144032	
Office:	TPR2 05.22, 163 Av. de Luminy, 13009 Marseille	
Nationality	Chinese	

## EDUCATION

12/2022 -	<b>Doctorale</b> (UMR7020 LIS Laboratoire d'Informatique et Systèmes, CANA team). Department of Mathématiques et Informatique de Marseille, Aix Marseille Université, FR.
10/2020 -10/2021	<b>Mater of Science</b> (Quantum Fields and Fundamental Forces -Merit). Department of Physics, Imperial College London, UK. MSc dissertation title "Topological Magnetic Monopoles and Electroweak Sphalerons". Dissertation supervisor: Prof. Arttu Rajantie. Personal tutor: Prof. Arkady Tseytlin.
09/2016 -06/2020	<b>Bachelor of Science</b> (Materials Physics -Class One Honours). Department of Physics and Astronomy, the University of Sheffield, UK. Personal tutor: Prof. Thompson Lee.  <b>Bachelor of Engineering</b> (Materials Science and Engineering -Average Mark: 92.27/100). Department of Oversea Education, Nanjing Tech University, China.

## TITLE OF THESIS

Near-Term Noisy Quantum Computing

## THESIS SUPERVISORS

Giuseppe DI MOLFETTA  
giuseppe.dimolfetta@lis-lab.fr  
Quotité de temps : 50  
HDR  
Grade : MCF

Hachem KADRI  
hachem.kadri@lis-lab.fr  
Quotité de temps : 50  
HDR  
Grade : MCF

## COMMITTEE MEMBERS OF THESIS

Benjamin AUDOUX

benjamin.audoux@univ-amu.fr

Laboratoire : UMR 7373 - I2M

Alessia MILANI - référent - HDR - PR

alessia.milani@univ-amu.fr

Laboratoire : UMR 7020 - LIS

## INTERNSHIP & RESEARCH EXPERIENCE

- 10/2022- 06/2022 Interned at **Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)** with Prof. Zhengwei Liu, researching in the quantum information area.
- 06/2022- 12/2021 Interned at the **quantum group at JD explore Academy**, Beijing, China.  
The JD Explore Academy is an institute led by Prof. Dacheng Tao. I worked in the quantum machine learning area, supervised by Yuxuan Du and Xingyao Wu.
- Published a survey with co-authors of “*Recent Advances for Quantum Neural Networks in Generative Learning*” (<https://ieeexplore.ieee.org/abstract/document/10113742>).
  - Researched on adversarial attacks in quantum generative learning models.
- 10/2017- 11/2018 Participated **Undergraduate Training Program for Innovation and Entrepreneurship** of Jiangsu Province as the principal investigator, with the project title “Research on High Performance LED Based on Multi - Quantum Well Perovskite”.
- 09/2017 Studied at Nanomaterials Laboratory of Nanjing Tech University as a member.

## AWARDS & HONOURS

### SCHOLARSHIPS

- 10/2019 **The First-class Scholarship**, Nanjing Tech University.
- 05/2019 **The First-class Scholarship**, Nanjing Tech University.
- 04/2019 **Nian Xi Scholarship**, Nanjing Tech University.
- 11/2018 **The First-class Scholarship**, Nanjing Tech University.
- 05/2018 **Special Scholarship**, Nanjing Tech University.
- 11/2017 **Special Scholarship**, Nanjing Tech University.
- 06/2017 **Special Scholarship**, Nanjing Tech University.

### OTHERS

- 07/2020 **Class One Honours**, the University of Sheffield.
- 06/2020 **Outstanding graduates**, Nanjing Tech University.
- 12/2018 **Merit Student**, Nanjing Tech University.
- 12/2018 **Outstanding Student Cadre**, Nanjing Tech University.
- 05/ 2018 **Second Prize for Band C in 2018 National English Competition for College Students**.
- 12/2017 **Merit Student**, Nanjing Tech University.

## LANGUAGES

Chinese	Native language
English	IELTS test (year 2020): Listening: 7.0 Reading: 8.5 Writing: 6.0 Speaking: 6.0 Overall: 7.0
French	A1 level courses attended

## PROGRAMMING SKILLS

Certificates	Jiangsu Computer Rank Exam Certificate (Jiangsu Province, China)- Grade I. National Computer Rank Exam Certificate (China)- Grade II.
Coding	C, python.