Jing **WANG**

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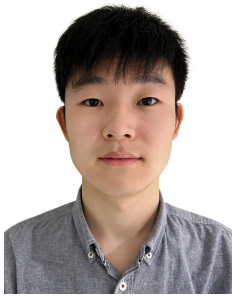

Education

Okayama University
Okayama, Japan

PhD student (**Currently D2**) [Division of Interdisciplinary Science] *October. 2021 - Present*

- **Thesis Project:** Dark Matter Search With Coherent Atoms.

Okayama University
Okayama, Japan

Master of Science [Division of Mathematics and Physics] *October. 2019 - September. 2021*

- **GPA:** 4.23/4.5
- **Courses:** Particle Physics, Cosmology, Atomic and Molecular Physics, Advanced Quantum Mechanics, Superconductivity.
- **Thesis Project:** Dark Matter Search With Atoms or Molecules.

Lanzhou University
Lanzhou, China

Bachelor of Engineering [School of Nuclear Engineering and Technology] *September. 2015 - July. 2019*

- **Courses:** Analytical Mechanics, Quantum Mechanics, Statistical Mechanics, Electrodynamics, Nuclear Physics, Electronics, Mathematical Methods of Physics, C Programming.
- **Thesis Project:** Size effect of nanoparticles on laser induced breakdown spectroscopy enhancement.

Skills & Interests

Languages English (Fluent), Chinese (Native), Japanese (Intermediate)

Lab Skills Laser Operation,3D MOT generation, X-Ray Operation, Vacuum Techniques, Data analysis by Python and ROOT.

Interests Atomic, molecular, and optical physics, Laser Cooling, Particle Physics, Cosmology

Academic

Dark Matter Search With Atoms or Molecules
Okayama University, Japan

Current research project *January.2021 - Present*

- My master's thesis project is about dark matter detection with coherent atomic/molecular transition, which is an interdisciplinary research involves particle physics and Atomic, molecular, and optical physics.
- Built up a simulation algorithm with Python to understand the dynamics of the atomic system.
- Dark matter signal rate estimation by perturbative calculation.
- Laser System development
- Cold atom target preparation with Cs 3D MOT
- Cesium forbidden transition measurement **(Current work)**

Lowest Excited State Study of Th^{229}
SPring-8, Japan

Member *November. 2020 - November. 2020*

- Thorium-229 (Th^{229}) has the lowest energy excited state thus could be utilized for an ultra-precise "nuclear clock". We are now working on the direct observation of this excited state using the strong synchrotron X-ray facility, SPring-8.
- Built up a set of X-ray experimental equipment for background study of this project. Mastered the entire process from design and construction to experimental data processing.

Nuclear Battery Development
Lanzhou University, China

Member *March. 2015 - December. 2015*

- Contributed to the calculation of energy conversion efficiency of composite dynamic radioisotope battery based on nanomaterials.

Extracurricular Activity

Sorbonne University Internship Grant
Sorbonne University, France

Exchange Student *September. 2022 - December. 2022*

- I am currently an exchange student in Sorbonne University, I joined the XeLab Project and work with Prof. Luca Scotto Lavina. XeLab is a Xenon TPC which will be constructed at the LPNHE and will be used to study the scintillation signal and also the background noise, such research can provide information for XENONnT experiment.

Sakura Science Program

Okayama University, Japan

MEMBER

November. 2017 - November. 2017

- Sakura science program is an exchange program held by Japan Science and Technology Agency. This program invites outstanding young students on short-term visits to Japan. I was lucky to be selected and visited Okayama University, this experience in Japan broadened my horizons and motivated me to study in Japan.

Summer School of CAS (Chinese Academy of Sciences)

University of CAS, China

SUMMER SCHOOL STUDENTS

May. 2017 - June. 2017

- Learned the basic knowledge of particle physics and ROOT; visited the BEPC and BESIII in the Institute of high energy physics, Chinese Academy of Sciences.
- Contributed to the research of the double charm baryon Ξ_{cc}^{++}. Estimated branching fractions of Ξ_{cc}^{++} decay.

Social Practice Activities

Lanzhou, China

LEADER

July. 2017 - July. 2017

- I have joined and organized various university activities for many times. In a social practice activity, as the leader, I led a team to interview the couriers in the city. And we held a report meeting attended by more than 200 students to introduced our survey results, this activity caused great reaction in the school.

Honors & Awards

2019.6	**1st Prize**, Outstanding undergraduate thesis	*Lanzhou, China*
2016.12	**1st Prize**, National Scholarship	*Lanzhou, China*
2016.10	**3rd Prize**, College student's innovation project	*Lanzhou, China*
2015.11	**Champion**, College football championship	*Lanzhou, China*