

## Unit Name

Electronic and Quantum Magnetism Unit

## Mentorship / Supervision

Sep 2024 - Present	Host (RI, SRS, VRS, VS), Mariia Lebedeva, Research Intern Mentor, Ian Ray Lyons, OIST Student
Jan 2024 - Aug 2024	Host (RI, SRS, VRS, VS), Marina Razzhivina, Research Intern
Sep 2023 - Present	Thesis Supervisor, Sandeep Vijayan, OIST Student
Jan 2022 - Present	Third Committee Member, Maria Carla Lupu, OIST Student
Sep 2021 - Present	Thesis Supervisor, Margarita Dronova, OIST Student
Sep 2019 - Dec 2024	Mentor, Soon Teh, OIST Student
Sep 2019 - Present	Mentor, Tai Duong Anh Tran, OIST Student
Jan 2019 - Apr 2024	Mentor, Markel Pardo, OIST Student

## Scholarly Contributions and Creative Productions

### Journal Article

Completed/Published

Dronova, M.; Morgan, Z.; Ye, F.; Silevitch, D.; Feng, Y.; Petříček, V. Three-Dimensional Checkerboard Spin Structure on a Breathing Pyrochlore Lattice. *Physical Review B* **2024**, *109*, 16.

Feng, Y.; Wang, Y.; Rosenbaum, T. F.; Littlewood, P. B.; Chen, H. Fermi Surface Origin of the Low-Temperature Magnetoresistance Anomaly. *Matter* **2025**.

Feng, Y. Quantum Interference in Superposed Lattices. *Proceedings of the National Academy of Sciences of the United States of America* **2024**.

## Scholarly Contributions (Unit Members)

### Term 2 2025

Margarita Dronova, Presentation at Conference, Spin order-disorder evolution in spinel oxide series Zn(Fe,Ga)2O4., APS March meeting, APS March meeting, 19-Mar-25, Completed/Published

### Term 1 2024

Margarita Dronova, Presentation at Conference, Evolution of spin glass state in pyrochlore-structured spinel oxide Zn(Fe,Ga)2O4, The symposium From Quantum Materials to Quantum Information: Symposium on Trans-Scale Quantum Science and Quantum Materials Synthesis, OIST, 12-Nov-24, Completed/Published

### Term 3 2024

Margarita Dronova, Presentation at Conference, Checkerboard antiferromagnetic ground state in ZnFe2O4., The International conference on New Frontiers in Advanced Magnetism, Hokkaido University, Sapporo, Japan, 06-Aug-24, Completed/Published