

# MERIT Errantry Report

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I visited Prof. Andrey Zheludev's group in Eidgenossische Technische Hochschule (ETH) and Prof. Henrik Rønnow's group in Ecole Polytechnique Federal de Lausanne (EPFL), and attended International Conference of Strongly Correlated Electron System in Prague. I gave seminars about ground state of frustrated magnet investigated by neutron scattering, and discussed with researchers who were working on neutron scattering experiment.

## Neutron scattering and Magnetism Group, ETH

Prof. A. Zheludev's group in ETH is famous for research on low-dimensional magnetic system and quantum spin system. Eight people including PhD students in his group and other group members joined the seminar. They were interested in my research, frustrated magnet. They gave me fruitful comments about my experimental results, and advised me related study which I had not known. Before the seminar, Prof. Zheludev showed me the latest instruments in his lab and introduced his PhD students. We discussed each research topic. The discussion greatly stimulated me.

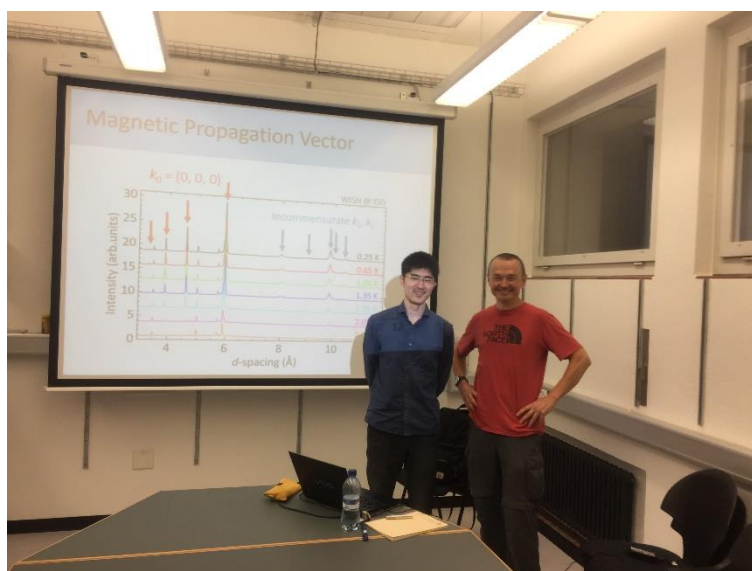


Figure 1: Prof. A. Zheludev at ETH

### **Laboratory for Quantum Magnetism (LQM), EPFL**

Prof. H. Rønnow's group is working on multiferroic materials and quantum spin systems. When I gave a seminar, all members in the group asked me honest questions and actively discussed them. In addition to the seminar, I carried out an experiment using a unique instrument in the group. I discussed the experiment with Dr. Huang and Dr. Zivkovic, and finally obtained very interesting results. We will keep this research in the future.

### **International conference on Strongly Correlated Electron System (SCES2017)**

I attended SCES2017 in Prague, Czech from 17/07 to 22/07. I presented a poster about magnetic structure in a frustrated magnets. Several researches in neutron facility in Europe were interested in my research and I got to know them. In addition, I knew latest trend of research topics overseas and developments of experimental techniques. This precious information would influence my research.

### **Summary**

In this visit, I gave seminars at Prof. A. Zheludev's group and Prof. H. Rønnow's group in Switzerland, and presented the poster in SCES2017. Arrangement of the visit and preparation of the seminar were tough works but I obtained the fruitful opinions and discussed with the researchers who had diverse values. Furthermore, I got to know the researchers in overseas neutron scattering community, which was the most precious experiment during this visit. I will continue to study with making use of this experience.

### **Acknowledgements**

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