Study report at National University of Singapore Graduate School of Science Department of Physics D2 Yoshihito Hotta

I stayed for three months from December 2015 at Centre for Quantum Technologies (CQT) in the National University of Singapore (NUS). I developed algorithms of image classification using matrix-product states (tensor-train decomposition) and a method to calculate stochastic processes using tensor networks. I could discuss them with many people and present them. After getting back to my country, I would like to continue my study, reflecting advises from people at CQT and would like to improve accuracy of the algorithms.

The host was Vlatko Vedral. NUS is the Asia top university. It has competent students and researchers. In addition, the staff kindly supported me during my stay, such as visa arrangements. Singapore is a country of immigrants, and is open to a foreigner like me. In addition because English is an official language, and I felt foreigners can comfortably live there. CQT has low barriers between laboratories and discussion is active. It is not unusual that when I sat down on a coach of a lounge discussion started suddenly. I felt getting feedback from a variety of researchers is not bad.



Picture: members of Vlatko group