Project Title:

Machine Learning Topological States of Matter

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If no job was executed, specify the reason.

In FY2020, there were additional delays due to the unexpected changes brought by the covid measures.

My research project was temporarily switched to another project, which was different from the initially planned target of studying more complicated topological states using machine learning. In the new project, by properly design the neural network, the total number of parameters of the network was only around 10^5, which can be efficiently (and conveniently) trained on a powerful desktop or even a laptop with parallel CPUs, so the project was not that computationally expensive, and the supercomputer was not used.

If more complicated tasks will be involved in the following, then GPU accelerations might be essential and the supercomputer will be used.