Quiz 6 (deadline: Tuesday 14 December 2021, 8:45 AM)

1. What is main purpose of using a multi-level graph partitioning algorithm?

Describe the main steps in a multi-level graph partitioning algorithm.

1. What are the main steps in the Barnes-Hut (multi-level NBody simulation) algorithm? What is the main result it has achieved in terms of computational time complexity?
2. Compared to the parallelization of the multi-grid algorithm, what causes the main difference/difficulty in terms of load balancing for the Barnes-Hut algorithm?