Star cluster simulations

Star cluster simulation is a type of N body simulation where the goal is to simulate the movement of the stars, or bodies, over time. For two bodies the problem can be solved analytically as is the case for the planets’ movement around the sun. However, with multiple bodies the problem becomes increasingly complex and requires numerical solutions.

This project aims to look into and recreate existing solvers and use that as a basis for developing them further to run on single machines rather than entire clusters. The final goal is to utilise machine learning to speed up the simulations.

Requirements:
Prior experience and a strong interest in machine learning is recommended. Creativity and strong programming skills are advantageous.

Interested? Please contact us for more details!

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