

CIS 4205 Spring 2009

## Effective Use of High Performance Computing

Instructor: Steve Lantz

Location and time: Upson 205, MWF 10:10-11:00 Duration: 8 weeks, 1/19-3/13 (2 credits, student option)

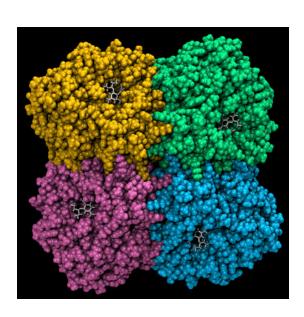
Sample topics: (for more, see www.cac.cornell.edu/~slantz/CIS4205)

- How to identify and exploit parallelism in algorithms and applications

How to measure parallel efficiency and diagnose performance bottlenecks

- Parallel programming with MPI, OpenMP, and task-farming techniques

Goal: for students to gain practical HPC experience for use in their specific fields



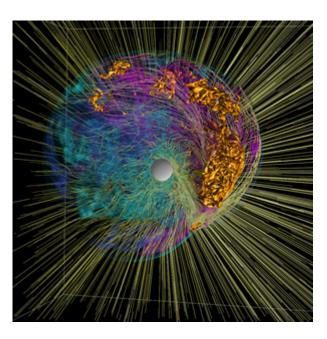


Image credits: (top) Ranger, TACC; (left) Avian Influenza/Tamiflu, R. Amaro, UCSD/SDSC; (right) Supernova Core Collapse, ORNL