

Iowa High Performance Computing Summer School 2013

Schedule of Lectures and Activities

Dates: May 20–22, 2013
 Location: 2523 UCC Training Room
 Faculty: Professor Gregory Howes University of Iowa
 Professor Daniel Bodony University of Illinois, Urbana-Champaign
 Professor Erik Schnetter Perimeter Institute for Theoretical Physics

Monday, 5/20		
Time	Course	Lecturer
8:15–9:00am	Arrival and Getting Online	
9:00–9:30am	Welcome and Introductions	All Faculty
9:30–10:15am	Introduction to High Performance Computing	Howes
10:15–10:30am	Break	
10:30–12:15am	MPI Programming and Hands-on Exercises	Bodony
12:15–1:30pm	Lunch	
1:30–2:45pm	MPI Programming and Hands-on Exercises (continued)	Bodony
2:45–3:30pm	Design of Parallel Algorithms	Howes
3:30–4:00pm	Introduction to Parallel Hydrodynamics Code HYDRO	Howes
4:00–5:00pm	Hands-on Exercises	
Tuesday, 5/21		
Time	Course	Lecturer
9:00–10:30am	Multi-threading and OpenMP	Schnetter
10:30–12:00pm	Hands-on Exercises	
12:00–1:30pm	Lunch	
1:30–3:00pm	GPU Computing and CUDA Programming	Howes
3:00–5:00pm	Hands-on Exercises	
Wednesday, 5/22		
Time	Course	Lecturer
9:00–10:30am	Parallel Performance and Optimization	Schnetter
10:30–12:00pm	Hands-on Exercises	
12:00–1:30pm	Lunch	
1:30–2:30pm	The Practice of High Performance Computing	Howes
2:30–4:00pm	Hands-on Exercises	
4:00–4:30pm	Evaluations, Questions, and Concluding Remarks	All Faculty