

Cyberinfrastructure Experiences for Graduate Students

Orientation Workshop, June 23 – 27, 2008

San Diego Supercomputer Center (Room 408)

Time	Topic	Presenter
Monday, June 23		
9:00 – 9:15 AM	Welcome and introduction of SDSC computational scientists	
9:15 – 10:30 AM	Student Introductions	
10:30 – 10:45 AM	Break	
10:45 – 11:30 AM	Student Introductions continued	
11:30 – noon	Overview of SDSC	Anke Kamrath Division Director, User Services
Noon – 1 PM	Lunch	
1:15 – 2:15 PM	Computational Astrophysics	Faculty talk: Prof. Mike Norman, Physics, UCSD
2:20 – 3:20 PM	Cyberinfrastructure for Educational Engineering	Faculty talk: Prof. Krishna Madhavan, Engineering and Science Education, Clemson University
3:30 – 4:30 PM	Introduction to Supercomputers and Architectures	Amit Majumdar, SDSC
Italian dinner at SDSC Patio		

Tuesday, June 24		
9:00 – 11:15 AM (with 15 mins break)	Introduction to MPI	Amit Majumdar and Mahidhar Tatineni, SDSC
11:15 AM – noon	SDSC Machine Room Tour	Don Thorp, SDSC
Noon – 1 PM	Lunch	
1:15 – 2:15 PM	OpenMP	Dmitry Pekurovsky, SDSC
2:15 – 3:15 PM	Hands-on MPI and OpenMP	Amit Majumdar, Mahidhar Tatineni, Dmitry Pekurovsky
3:15 – 3:30 PM	Break	
3:30 – 4:30 PM	Software Development Practices	Rick Wagner, UCSD Physics
UCSD Walking tour and happy hour/dinner at Rock Bottom near La Jolla Village Square		
Wednesday, June 25		
9:00 – 9:30 AM	Earthquake Simulations on Parallel Machines	Yifeng Cui, SDSC
9:30 – 10:00 AM	Single Processor Optimization	Ross Walker, SDSC
10:00 – 10:15 AM	Break	
10:15 – noon	Single Processor Optimization	Ross Walker, SDSC
Noon – 1:00 PM	Lunch	
1:15 – 2:45 PM	Parallel Math Libraries and hands-on work	Dmitry Pekurovsky, SDSC
2:45 – 3:00 PM	Break	
3:00 – 4:30 PM	HPC Tools and Profiling	Mahidar Tatineni, SDSC
Walk by summer dorms and dinner at BJ's Pizza at La Jolla Village Square		

Thursday, June 26		
9:00 – 9:45 AM	Introduction to SDSC Data Resources	Ken Nunes, SDSC
9:45 – 10:30 AM	SDSC Data Collections	Natasha Balac, SDSC
10:30 – 10:45 AM	Break	
10:45 – noon	Scientific Workflows	Ilkay Altintas, SDSC
Noon – 1:00 PM	Lunch	
1:15 PM – 4:00 PM (with 15 mins break)	Scientific Visualization	Steve Cutchin, Amit Chourasia, SDSC
Walk by CalIT2 office and dinner at one of the restaurants at La Jolla Village Square		
Friday, June 27		
9:00 – 10:00 AM	Summer Internship details, logistics	
10:00 – 11:30 AM	Discussion with mentors for summer plan and mentor assignment	
11:30 – noon	Workshop evaluation	
Lunch at SDSC		