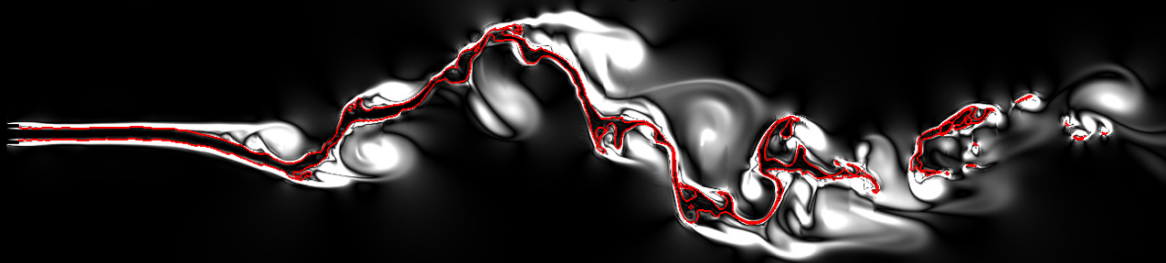


# Center for Scientific Computing & Visualization Research



## You are cordially invited to a workshop on *THE POWER OF SCIENTIFIC COMPUTING*

The dramatic increase in the speed and data-handling capability of high performance computers, and a complementary development of novel algorithms, have transformed the nature of scientific investigation. Computation is now used regularly and intensively for the simulation of complex physical problems.

**Scientific computation has joined experiment and theory to become a central pillar of modern science.**

Please join us to learn about the impact of computing on the process of scientific discovery at UMass Dartmouth.

Location: Textiles room 105

### Part I: Tuesday, September 17

- 1pm Welcome
- 1:20-2:20 Yanlai Chen (Mathematics)  
*From the F-22 Raptor to Pregnancy Tests*
- 2:20-3:00 Collaboration Brainstorming
- 3:00-3:30 Mazdak Tootkaboni (Civil)  
*Reducing Offshore Platform Response to Waves*
- 3:30-4:00 Akil Narayan (Mathematics)  
*Blurring and De-blurring Scientific Models*
- 4:00-4:30 Vanni Bucci (Biology)  
*Susceptibility and Resistance to C. diff infection*
- 4:30-5:00 Collaboration Brainstorming
- 5:00-6:00 Mehdi Raessi (Mechanical)  
*Computational Simulations of Energy Systems*
- 6:00pm Refreshments

### Part II: Tuesday, September 24

- 1pm Welcome
- 1:20-2:20 Robert Fisher (Physics)  
*Exploding Stars and the Accelerating Universe*
- 2:20-3:00 Collaboration Brainstorming
- 3:00-3:30 Bo Dong (Mathematics)  
*Multiscale Simulations of Semiconductor Devices*
- 3:30-4:00 Firas Khatib (Computer Science)  
*Crowdsourcing in the Computational Sciences*
- 4:00-4:30 Ying-Tsong Lin (WHOI)  
*Underwater Sound Propagation*
- 4:30-5:00 Collaboration Brainstorming
- 5:00-6:00 Alfa Heryudono (Mathematics)  
*Human Tear Film Dynamics*
- 6:00pm Refreshments



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