

Scientific Computing

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CBC Talk on How to SCI in Utah with good CARMA: Image Based Science in Cardiac Electrophysiology - June 2, 2010

Professor MacLeod, Scientific Computing and Imaging Institute, University of Utah, USA will visit us on Wednesday June 2. Don't miss this opportunity to meet one of the key researchers in the heart modeling community.

Total number of participants: 8
 Total number of guests outside of CBC: 1
 Number of different nationalities represented: 2
 Total number of speakers: 1
 Total number of talks: 1

Time and place: *Wednesday June 2, 11.00-12.00 in Bakrommet*



Abstract

How to SCI in Utah with good CARMA: Image Based Science in Cardiac Electrophysiology

Rob MacLeod, Ph.D.
 Associate Director, Scientific Computing and Imaging Institute (SCI).
 Associate Director, Nora Eccles Harrison Cardiovascular Research and Training Institute (CVRTI)

Modern research in basic and translational science has become an enormously interdisciplinary undertaking requiring more and more diverse teams of scientists, engineers, physicians, and technical support experts. At Utah, we are creating such teams centered around a range of disciplines with a common theme of scientific computing as the enabling technology. The SCI ("ski") Institute serves as the nexus for a host of such teams, including many in biomedical and biological disciplines, especially in the study of bioelectric fields and electrophysiology of the heart and the nervous system. The CVRTI is a vertically integrated institute dedicated to the study of basic cardiac electrophysiology, from membrane proteins to intact organisms and seeks to explore the interplay between scales of the heart. CARMA is a newly founded center dedicated to the study of cardiac arrhythmias with special focus on atrial fibrillation using MRI based approaches to manage patients and develop novel interventional approaches to treatment. At the intersection of these centers are many research projects that combine image acquisition, processing, and analysis, computer model generation and optimization, numerical simulation of physiology, and visualization of each facet of the projects.

This presentation will attempt the impossible and convey a global sense of how Utah is approaching the new age of interdisciplinary science as well as highlight some specific features of the image based methods in topics such as the simulation of defibrillation, the experimental and simulation of cardiac ischemia, and the comprehensive management of patient with atrial fibrillation using imaging and image analysis and visualization.

What	▪ Talk
When	Jun 02, 2010 from 11:00 AM to 12:00 PM
Where	Bakrommet @ Simula
Contact Name	Bjørn Fredrik Nielsen
Attendees	Bjørn Fredrik Nielsen Glenn Lines Joachim Haga Marius Lysaker Ola Skavhaug Per Grøttum Rob MacLeod Sam Wall
Add event to calendar	 vCal  iCal