

Proposed Schedule for SE-CSE09 Workshop (TENTATIVE)

8:00-9:20 **Session 1 – Software Development Processes for CS&E**

“How Do Scientists Develop and Use Scientific Software?” by Jo Erskine Hannay (johannay@simula.no), Hans Petter Langtangen (hpl@simula.no), Carolyn MacLeod (cmacleod@cs.utoronto.ca), Dietmar Pfahl (dietmarp@simula.no), Janice Singer (janice.singer@nrc-cnrc.gc.ca) and Greg Wilson (gvwilson@cs.utoronto.ca)

“Some challenges facing software engineers developing software for scientists” by Judith A. Segal (J.A.Segal@open.ac.uk)

“Barely Sufficient Software Engineering: 10 Practices to Improve Your CSE Software” by Michael A. Heroux (maherou@sandia.gov) and James M. Willenbring (jmwill@sandia.gov)

“An Empirical Characterization of Scientific Software Development Projects According to the Boehm and Turner Model: a Progress Report” by Carlton A. Crabtree (cac1@umbc.edu), A. Güneş Koru (gkoru@umbc.edu), Carolyn Seaman (cseaman@umbc.edu) and Hakan Erdogmus (Hakan.Erdogmus@nrc-cnrc.gc.ca)

9:20-10:40 **Session 2 – Specific Techniques for CS&E Software Development**

“Refactoring and the Evolution of Fortran” by Jeffrey L. Overbey (overbey2@illinois.edu), Stas Negara (snegara2@illinois.edu) and Ralph E. Johnson (rjohnson@illinois.edu)

“Integration Strategies for Computational Science & Engineering Software” by Roscoe A. Bartlett (rabartl@sandia.gov)

“Reusability of FEM Software: A Program Family Approach” by Wen Yu (yuw4@mcmaster.ca) and Spencer Smith (smiths@mcmaster.ca)

“Developing Scientific Applications Using Generative Programming” by Ritu Arora (ritu@cis.uab.edu), Purushotham Bangalore (puri@cis.uab.edu), Marjan Mernik (mernik@cis.uab.edu)

10:40 – 11:10 **Break**

11:10 – 12:30 **Session 3 - ???**

“Testing for Trustworthiness in Scientific Software” by Daniel Hook (hook@cs.queensu.ca) and Diane Kelly (dkelly@kingston.net)

“Injecting Software Architectural Constraints into Legacy Scientific Applications” by David Woollard (woollard@jpl.nasa.gov), Chris Mattmann (mattmann@jpl.nasa.gov) and Nenad Medvidovic (nen@usc.edu)

“Comparing Bioinformatics Software Development by Computer Scientists and Biologists: An Exploratory Study” by Parmit K. Chilana (pchilana@u.washington.edu), Carole L. Palmer (clpalmer@uiuc.edu) and Andrew J. Ko (ajko@u.washington.edu)

“Preparing Scientists for Scalable Software Development” by Valerie Maxville (maxville@ivec.org)

12:30 – 2:00 **Lunch Break**

2:00 – 2:30 Identify topics for break-out groups

2:30 – 3:30 Break-out group sessions

3:30 – 4:00 **Afternoon Break**

4:00 – 5:00 Report back from Breakout groups

5:00 – 5:30 Wrap-up