**The ECE Department, and the Computer Chapter of the IEEE South Alberta Section
are excited to host an invited talk titled:**

Putting the Science into a Scientific Software Development Process

Speaker: Dr. Diane Kelly
Associate Professor, Royal Military College of Canada

Date/time: Monday, September 24, 2012, 2-3 pm
Everyone is welcome. There will be light refreshments.

Location: ICT 516, University of Calgary

Abstract:

Over the past few years, scientific software development has been variously likened to Document Driven, Agile, Open Source, and End-User development methodologies. There are characteristics of each methodology that can be found in scientific software development, but the fit for any one methodology is far from perfect. If we consider the goals and priorities of scientific software development and those of each development methodology, then the lack of fit becomes more obvious. The need to define a methodology describing how scientific software is developed comes partly from the Canadian nuclear industry where scientific simulation software comes under regulatory requirements. The lack of fit of acknowledged development methodologies suggests we need to describe a novel methodology for scientific software development. In this talk, Dr. Kelly discusses her research into a novel methodology, and particularly her interviews with scientists on how to put the Science into the software development process.

Speaker's Biography:

Diane Kelly is an Associate Professor in the Department of Mathematics and Computer Science at the Royal Military College of Canada. She is cross appointed to RMC's Department of Electrical and Computer Engineering and to the School of Computing at Queen's University. Diane's research focuses on ways to increase the trustworthiness of scientific software. Diane offers a graduate seminar course to both RMC and Queen's students that critiques software development and quality assurance approaches popular in software engineering when specifically applied to scientific software. Diane has a PhD and MEng in Software Engineering both from RMC. Her BSc in Pure Mathematics and BEd in Mathematics and Computer Science are both from the University of Toronto. Diane worked in industry for over twenty years as a scientific software developer, technical trainer, and QA advisor.

Seminar Coordinator:

Dr. Vahid Garousi (vgarousi@ucalgary.ca), Associate Professor in the Department of ECE, and Computer Chapter Chair of the IEEE South Alberta Section. For more information, visit our wesbite at: http://sas.ieee.ca