

The AARMS Collaborative Research Group in Numerical Analysis and Scientific Computing Workshop on “Domain Decomposition Methods for the Parallel Solution of Partial Differential Equations”

Domain decomposition methods for the numerical solution of PDEs comprise a field of intense activity driven by the need for the efficient solution of mathematical models of physical phenomena of ever increasing complexity. These methods are designed to make efficient use of high performance, parallel computing systems. **The upcoming workshop will be held at Dalhousie University in Halifax, Nova Scotia, Canada, August 4–8, 2015.** The workshop is timed to begin after the completion of the 2015 AARMS Summer School.

The workshop will have three primary components:

- a two–day short course on domain decomposition methods for the numerical solution of PDEs
- a day of problem presentations by researchers in applied and industrial fields highlighting computational difficulties and opportunities for which domain decomposition methods may be applicable
- a two–day interactive program bringing together experts in domain decomposition methods for PDEs with practitioners in applied fields (and associated graduate students and post docs) to investigate the use of domain decomposition methods for PDEs in applied problems in various disciplines.

The intensive two–day short course will be taught by Prof. Martin Gander from the University of Geneva. Prof. Gander is an internationally recognized leading expert in Schwarz methods - a class of domain decomposition methods for steady state and time dependent PDEs. Two other domain decomposition experts who have confirmed their participation in the workshop are

- Victorita Dolean (Nice)
- David Keyes (King Abdullah University of Science and Technology)

This workshop is organized by the AARMS Collaborative Research Group in Numerical Analysis and Scientific Computing: Ronald D. Haynes (MUN), Hermann Brunner (MUN), and Paul Muir (Saint Mary's), with additional local organization from David Iron (Dalhousie), and is supported by the MUN Conference Fund, AARMS, and Dalhousie University.

Further details regarding the workshop will be posted to the workshop website <http://www.math.mun.ca/anasc/ddworkshop.html>.

