



Faculty of Computer Science 2007–2008 Seminar Series

Resource-Aware Load Balancing of Parallel Applications

By

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Wednesday, September 12th, 2007

3:30pm

ITC317

This seminar will present a survey of recent work on resource-aware load balancing of graph-based parallel applications, including work done at UNB. This important class of applications, which includes partial differential equation solvers and molecular dynamics simulations, requires partitioning of a communication graph for parallel execution.

These distributed high performance computing applications have formed an important class of grid applications from the early days of the I-Way to the TeraGrid (<http://www.teragrid.org>) of today. The main reason is that the aggregation of multiple parallel computers permits problem solutions that require more resources than are available in a single system. Efficient execution of parallel applications on computational grids requires knowledge of the grid's characteristics, which poses challenges for partitioning algorithms.

STUDENTS ARE ENCOURAGED TO ATTEND
