

Tentative Schedule for Regional Conference on “Radial Basis Functions: Mathematical Developments and Applications” June 20, 2011 to June 24, 2011

The conference will feature ten principal talks (PL). Six supplementary talks (SL) will complement these principal talks. Each talk will be followed either by a question and answer period (Q & A) or by a period of informal discussion. There will also be time set aside for informal discussions. The principal lectures will cover these areas of interest as follows:

PL1.	Introduction to finite difference (FD) methods and their generalization into pseudospectral (PS) methods.
PL2.	PS methods in periodic and non-periodic cases; Time stepping and stability considerations.
PL3.	Introductions to RBFs
PL4.	Issues and algorithms related to numerical conditioning and computational speed.
PL5.	The Runge phenomenon and the Gibbs phenomenon for RBFs.
PL6.	RBFs for PDEs.
PL7.	Convective flows in spherical geometries.
PL8.	Local node refinement: method and application.
PL9.	Test problems from the geosciences (with respect to RBFs).
PL10.	Modeling in the geosciences (with respect to RBFs).

The conference will begin at 9 am on Monday, June 20, 2011 and run through noon on Friday, June 24, 2011 (5 days).