



**The Hong Kong Polytechnic University
Department of Applied Mathematics**

Colloquium

On

Extrapolation methods for linear algebra problems

by

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Abstract

Many methods used in numerical linear algebra are iterative. Quite often, the sequence they produce converge slowly, thus restricting their practical use. This talk will present a survey of methods for their acceleration: sequence transformations, extrapolation methods, projection methods. Then, some specific applications will be discussed: estimation of the norm of the error for the solution of linear systems, Tikhonov's regularization, estimation of traces of matrix powers, convergence acceleration of Kaczmarz' method..

Date : 22 February, 2013 (Friday)

Time : 3:00 p.m. – 4:00 p.m.

Venue : HJ610, The Hong Kong Polytechnic University

*** * * ALL ARE WELCOME * * ***