The Hong Kong Polytechnic University
Department of Applied Mathematics

Colloquium

Improved Optimization Methods for Image Registration Problems

by

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Abstract

Image registration problems attract much attention of mathematicians and medical researchers because of the special requirements from medicine. Based on some mathematical model, we proposed two new methods for optimization problems arising from Image Registration problems. These two methods are based on simple subspace heuristics. We give some theoretical analysis and numerical tests. Numerical results illustrate the improvements of proposed methods for the problem.

Brief CV: Received BS in Math from Nanjing Institute of Technology, China in 1982, Master degree from Southeast University, China in 1988, Ph.D. from Institute of Pure and Applied Mathematics, Brazil in 1993, visiting scholar with Gene Golub at Stanford University from 1998-1999. Once worked in Southeast University, China from 1982-1991, Full professor at Federal University of Parana, Brazil since 1996. He got Brazilian Science Medal in 2008, Gra-Cruz medal in 2018, elected as fellow of Brazilian Academy of Sciences in 2012. He collaborated with many people such as Gene Golub, Robert Plemmons, Lothar Reichel, Yaxiang Yuan, Yu-Hong Dai, and others and published more than 100 research papers. His research area is Numerical Linear Algebra, Optimization, Numerical Analysis, and Applications in several areas.

Date :   7 December 2018 (Friday)
Time :   11:00a.m. – 12:00noon
Venue : TU801, The Hong Kong Polytechnic University

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