

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

Colloquium

Galerkin methods for delay differential equations

By

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Abstract

In this report, we first introduce delay differential equations and make a review of some general numerical methods. We then introduce the proposed Galerkin methods under different meshes for several kinds of delay differential equations and present the convergence results. Based on the local superconvergence results, several postprocessing techniques to accelerate the global convergence are proposed. We also list some open problems for these special differential equations.

Date : 16 Sept, 2020 (Wednesday)

Time : 15:00-16:00 (Hong Kong Standard Time GMT +8)

Host: Dr. Zhou Zhi, The Hong Kong Polytechnic University

Speaker: Prof. Qiumei HUANG, Beijing University of Technology

Venue : Online Talk via Zoom(Meeting ID: 951 8580 3525)

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