INSTITUTE OF MATHEMATICAL SCIENCES
UNIVERSITI MALAYA

MONTHLY RESEARCH SEMINAR SERIES (10/2022)

Title: Weighted Mean Iterative Methods for Solving Fredholm Integral Equations.

Speaker: Dr. Mohana Sundaram Muthuvalu
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Date: 17/06/2022 (Friday)

Time: 3.00 pm – 4.00 pm

Platform: Google Meet
Google Meet joining info
Video call link: https://meet.google.com/uxp-difm-jhw
Or dial: (US) +1 415-985-8250 PIN: 667 190 936#

ABSTRACT

The theory and application of the Fredholm integral equations (FIEs) have been one of the important tools in various areas of science, mathematics and engineering. On the other hand, FIEs are encountered in numerous applications in many fields, including continuum mechanics, potential theory, geophysics, electricity and magnetism, kinetic theory of gases, steady-state heat conduction, fracture mechanics, radiative heat transfer, inverse conductivity and scattering of electromagnetic wave problems. Consequently, this talk will discuss the application and implementation one of the two-stage iterative methods, i.e., Weighted Mean (WM) and its variants in solving FIEs. The effectiveness and comparison of the WM methods by solving the test problems will be discussed.

All are Welcome