



UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

INSPEM WEEKLY SEMINAR

3/2019

Date & Time

18th January 2019, Friday @ 3.15 pm

Venue

Al-Farabi Seminar Room, Second Floor,
INSPEM

Presenter

Dr. Ismail Mohd

Research Fellow
Laboratory of Computational Statistics & Operations
Research



Topic

A Globally Convergent Interval Newton Method for Computing and Bounding Real Roots of a Function with One variable

Abstract

It is known that Newton's method is locally convergent. Interval mathematics should be used to make Newton's method as a globally convergent. In this seminar will be shown how to use interval mathematics for computing and bounding the simple and multiple roots. The numerical computations for the two examples are sufficient to convince us of the "Newton Methods Able To Solve Nonlinear Problem" statement.