

NTU Math Seminar

演講者 : Ying Wang (University of Oklahoma)

講題 : Mathematical Analysis and Numerical Methods for an Underground Oil Recovery Model

時間 : 2019年2月25日 (星期一) 11:00 - 12:00 a.m.

地點 : 臺灣大學天數館 440 室

摘要 : In this talk, I will discuss an underground oil recovery model which include a third-order mixed derivatives term resulting from the dynamic effects in the pressure difference between the two phases. Analytic study on the computational domain reduction will be provided. A variety of numerical examples in both one and two space dimensions will be given. They show that the solutions may have many different saturation profiles depending on the initial conditions, diffusion parameter, and the third-order mixed derivatives parameter. The results are consistent with the study of traveling wave solutions and their bifurcation diagrams.

茶會 : 13:30-14:00 (天數館 519 室)

相關事宜請與顏湘伶小姐聯絡 Tel:(02)3366-2822 歡迎上網查詢 網址 : <http://www.math.ntu.edu.tw>