

Mathematics and Mathematics Education <u>Academic Group</u>



MME seminar #4



A/P Dong Fengming A/P Zhao Dong Sheng

Date: 23rd Nov, 2015 Time: 3.30 to 4.30 pm

Venue: Journal Room (NIE7-03-16)



Talk 1: On Tutte Polynomials

Talk 2: Some results on dcpo models of T1 spaces

Abstract

Fengming will briefly introduce Tutte Polynomial of matroids and graphs: some properties and open problems on this polynomial.

Dong Sheng will talk about the recent work on directed complete poset (dcpo) model that he presented at the XII domain workshop held in Cork, Ireland. The dcpo model of a topological space X is a dcpo P such that X is homeomorphic to the maximal point space of P with the subspace topology of the Scott space of P. Dcpo models establish a new bridge between the classic general topology and the recently developed domain theory. It has been proved previously that every T1 space has a dcpo model. However, for the general T1 spaces, the dcpo models are not convenient to use (the elements usually are the filters of open sets). In this talk, he will present some characteristic properties of T1 spaces whose all nonempty closed compact subsets form a dcpo model.