

OPTIMIZATION SEMINAR

(Mathematics & Computer Science)



Monday - Feb. 27, 2012
1:00 - 1:50 p.m. in E-575

Presenter: Stephen Nsoh (supervisor Dr. Robert Benkoczi)

Abstract: Resource allocation in Wimax Mesh Networks

A wimax mesh network consists of a base station (BS) and several subscriber stations (SS). The BS has a wired connection to the internet and SSs have to relay their traffic to the BS through multihop transmission. Two main design challenges need to be addressed in these networks: 1. construction of a routing tree that shows the route from every SS to the BS, and 2. scheduling links in the tree so as to maximize system throughput. In this research, we present a routing scheme that strikes a balance between interference and traffic load together with a throughput aware scheduling to maximize the number of concurrent transmissions in the network.

Everyone is welcome.

Light refreshments and drinks will be served. Please bring your own cup.