

Department of Mathematics and Statistics Colloquium Tuesday January 29 AMB 164 4:00 pm

New metrics on networks arising from modulus and applications of Fulkerson duality

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Abstract

The concept of *p*-modulus gives a way to measure the richness of a family of objects on a graph. We will investigate the families of connecting walks between two fixed nodes and show how to use *p*-modulus to form a parametrized family of graph metrics that generalize several well-known and widely-used metrics. Also, Fulkerson duality will be introduced and will be used in the proof of our main theorem regarding the new family of metrics.

Refreshments at 3:45