



**The Hong Kong Polytechnic University
Department of Applied Mathematics**

Colloquium

On

Zero Forcing for Sign Patterns

by

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Abstract

We introduce a new variant of zero forcing – signed zero forcing. The classical zero forcing number provides an upper bound on the maximum nullity of a matrix with a given zero-nonzero pattern. The new variant provides an analogous bound for the maximum nullity of a matrix with a given sign pattern. As an example, we compute the maximum nullity of a Z-matrix whose graph is the line graph of a clique. This is joint work with Felix Goldberg.

Date :15 Nov, 2013 (Friday)

Time : 3:00 p.m. – 4:00 p.m.

Venue : HJ610, The Hong Kong Polytechnic University

*** * * ALL ARE WELCOME * * ***