

Positive Semidefinite Product Throttling

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Product throttling answers the question of minimizing the product of the resources needed to accomplish a task, and the time in which it takes to accomplish the task. In this talk, the task that we wish to accomplish is positive semidefinite zero forcing.

Positive semidefinite zero forcing is a game played on a graph, G that starts with a coloring of the vertices as white and blue at each step any vertex colored blue with a unique white neighbor in a component of the graph formed by deleting the blue vertices from G “forces” the color of the white neighbor to become blue. We give various results and bounds on the product throttling number.

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