

## **Cut ideals and their application to regular designs in statistics**

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Recently, cut ideals (toric ideals of cut polytopes of finite graphs) and corresponding toric rings are studied by many researchers. It is known that cut ideals have application to statistics (binary graph models, phylogenetic models etc.). In this talk, we will survey recent results on cut ideals and apply them to problem on regular designs in statistics.

This application is based on a joint work with S. Aoki and T. Hibi.