ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO THE DOCTORAL SEMINAR

Graphical Designs

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Chaired by Angelika Wiegele | Department of Mathematics

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N.2.35

ABSTRACT

Graphical designs are quadrature rules on graphs that are discrete analogs of spherical designs on the sphere. They have a number of applications to areas such as graph sampling and random walks. An important question about designs is how to compute/optimize over them. I will explain how positively weighted designs can be organized on the faces of a polytope, and how this connection can be used to compute and optimize designs in several families of graphs. Joint work with Catherine Babecki and Stefan Steinerberger.

We hope to see you there!