

**On Discrepancy and Mesh Norm for
 s -Extremal Configurations on Compact Sets in \mathbb{R}^n**

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The problem of distributing a large number of points over the surface of a smooth manifold is an interesting and widely studied problem with numerous applications in diverse areas. In this talk, we will discuss discrepancy and mesh norm estimates for N -arrangements of points on a class of d -dimensional compact sets embedded in \mathbb{R}^n which interact through the power law (Riesz) potential $V = |\cdot|^{-s}$, where $s > 0$ and $|\cdot|$ is the Euclidean distance in \mathbb{R}^n . Our results complement recent important and deep theorems obtained by Ed Saff and his collaborators. This is joint work with P. Grabner and V. Maymeskul