

Isoperimetric Problems in Integral Geometry (TU Wien, Supervisor: F. Schuster)

Among several lines of research in convex geometric analysis, two have undergone an explosive development in recent years: the theory of isoperimetric and functional inequalities, and the enhanced understanding of fundamental notions of the subject via the theory of valuations - the latter forms the core of modern integral geometry. However, the underlying bigger picture behind the strong relations between these two areas has yet to be revealed. The main focus for this research position would lie in the systematic exploitation of the “valuations point of view” to reshape not only the way isoperimetric inequalities are thought of and applied but also the way these inequalities are established.

Applications have to be sent online to: barbara.triebl-kraus@tuwien.ac.at; see [TU Wien University Gazette 01/2020, 6.2.5](#). The deadline for application is **February 20, 2020**.