ALINA STANCU, Concordia University

On convex bodies with sections of prescribed volume

Part of a larger project with several collaborators, we are studying how certain measurements of non-central sections of a convex body determines uniquely the convex body. Under extra hypotheses, we will show some characterizations of convex bodies in the Euclidean n-space whose (n-1)-dimensional sections tangent to a strictly, smooth, compact convex set contained in their interior have equal volume.