JULIAN HADDAD, Universidade Federal de Minas Gerais

Explicit representations of isotropic measures in extremal positions

It is known since the work of F. John in 1948, that if the unit euclidean ball is the ellipsoid of minimal volume containing a convex body K, then there is a decomposition of the identity given by a centered isotropic measure supported in the set of contact points.

In this work, we present a constructive proof of this measure, and propose an algorithm to compute the weights of the decomposition when the contact points are finite.

Based in a joint work with F. Baêta.