Anne Marie Svane

Crofton type formulas for Minkowski tensors

Joint with Eva B. Vedel Jensen

Minkowski tensors can be used to characterize the geometry of an object. In stereology, Minkowski tensors are often estimated from the intersection with a line or plane. In this talk, we consider the mean of such an estimator when the intersecting subspace is uniform random either among all affine subspaces or all subspaces going through a fixed point. In particular, we consider the case where a Minkowski tensor of the intersection is computed relative to the intersection plane. This generalizes the classical Crofton formula.