Inner and outer Mean Radii of Convex Bodies

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We are going to introduce the notions of inner and outer mean radii of convex bodies, with respect to projections and sections, that are generalizations of the notions of inradius and circumradius of convex bodies. They belong to a bigger family of radii for convex bodies and we are going to see the similarities and differences between them. After showing some basic properties of the radii, we will consider the behavior of the radii with respect to geometric symmetrizations of convex bodies, as Steiner and Minkowski symmetrizations, and with respect to the intrinsic volumes.