

## Complex $L_p$ -Intersection Bodies

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Starting with Lutwak's definition of the intersection body in connection with the famous Busemann–Petty problem, there has been a big progress in the systematic study of this operator. Especially the  $L_p$ -analogue, the  $L_p$ -intersection body, has raised a lot of attention, recently. In this work, we examine a complex version of the  $L_p$ -intersection body and prove basic properties. In analogy with the real setting, the complex  $L_p$ -intersection bodies yield an interpolation between complex centroid bodies and the complex intersection body (as introduced by A. Koldobsky, G. Paouris, M. Zymonopoulou). Moreover, we prove a Busemann-type intersection inequality for the case  $p = -1$ .

This is joint work with G. Hofstätter.