

## $L_p$ -MIXED INTERSECTION BODIES

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*Abstract.* In this paper, we prove a dual Bergstrom type inequality for  $q$ -dual mixed volumes. Furthermore, we introduce the  $L_p$ -mixed intersection bodies for any real number  $p \neq 0$ , and establish some interesting inequalities for  $L_p$ -mixed intersection bodies involving a Minkowski type inequality and three Brunn-Minkowski type inequalities.

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