## **ELISABETH WERNER**,

 ${\cal L}_p$  relative surface areas

Motivated by a duality result, we define new surface area measures for ball-convex bodies. We call these measures  $L_p$  relative surface areas. We show that these quantities are rigid motion invariant, upper semi continuous valuations. We establish monotonicity properties of these quantities which lead to new entropy functionals for convex bodies.

Joint work with D. Yalikun.