

© 2008 Heldermann Verlag
Journal of Convex Analysis 15 (2008) 623–634

B. Kawohl

Mathematisches Institut, Universitaet Koeln, 50923 Koeln, Germany
kawohl@math.uni-koeln.de

M. Novaga

Dip. di Matematica, Università di Pisa, Largo B. Pontecorvo 5, 56127 Pisa, Italy
novaga@dm.unipi.it

The p -Laplace Eigenvalue Problem as $p \rightarrow 1$ and Cheeger Sets in a Finsler Metric

We consider the p -Laplacian operator on a domain equipped with a Finsler metric. After deriving and recalling relevant properties of its first eigenfunction for $p > 1$, we investigate the limit problem as $p \rightarrow 1$.

Keywords: p-Laplace, eigenfunction, Finsler metric, Cheeger set, anisotropic isoperimetric inequality.

MSC: 35J20, 35J70, 49A52, 49G05, 52A05, 52A40