ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

8. Analysis

1991 MS Classification: 26D15
Persson, Lars-Erik, Luleå University, Sweden
Sharp multidimensional multiplicative inequalities for weighted Lebegue spaces.
Let C denote an arbitrary cone in Rn with the origin as a vertex. A multidimensional multiplicative inequality for weighted Lebegue spaces on C with homogeneous weights is proved. The inequality is sharp and all cases of equality are pointed out. In particular, this inequality may be regarded as a weighted multidimensional extension of previous inequalities of Carlson, Beurling and Levin.