

HESSIAN MEASURES FOR NON-COMMUTATIVE VECTOR FIELDS

N. TRUDINGER

Abstract.

Some years ago, we proved in collaboration with Xu-jia Wang that the k -Hessian in Euclidean n -space, ($k = 1, 2, \dots, n$), can be extended as a measure on k -convex functions, weakly continuous with respect to a.e convergence. In this talk we consider extensions to non-commutative vector fields and curvatures. We also point out an analogy with recent work of Alice Chang on the Schouten tensor.