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Minkowski type integral formulae on weighted manifolds and applications

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Abstract

Using the weighted Newton transformation T_k^∞ and the weighted Symmetric functions σ_k^∞ [11], we derive in this work a serie of integral formulae for hypersurfaces embedded in weighted manifolds These formulae generalize the higher order Minkowski integral formula [2] and the Kwong foumula [17] for the weighted case.

We give also some applications of these formulae.

Keywords : Weighted Newton transformations, Weighted mean curvature, Minkowski formula.

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