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*Spinorial quasi local mass and a refined Witten identity*

Motivated by an attempt to understand the Penrose inequality from a spinorial perspective, a quasi-local mass expression defined in terms of two spinor on a maximal, asymptotically Euclidean initial data set is studied. A refined Witten identity underlying the quasi-local mass definition is derived and its connection with a Yamabe like conformally invariant functional is pointed out. A spinor identity is also constructed, from which the Kato-Yau Inequality for a two spinor field follows. The standard Witten identity is then recovered by choosing the appropriate spinor norm as test function in the conformally invariant functional. The issue of regularisation of zero points of the spinor field in order to avoid singular behaviour of the quasi-local mass definition is also addressed.