

About the twisted Dirac operator of a Kähler manifold

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Abstract - Let us consider $\mathbf{G}(M)$ the twistor space of generalized complex structures on a $2n$ -dimensional manifold M as the associated bundle with the principal fibre bundle of frames of $TM \oplus T^*M$, with structure group $SO(2n, 2n)$ and standard fibre the homogeneous space $SO(2n, 2n)/U(n, n)$. Considering the compact Kähler manifold M as a submanifold its generalized twistor space $G(M)$ the lower bounds estimation of eigenvalues of twisted Dirac operator is considered.

Key words and phrases : generalized complex structure, twistor space, spin structure, submanifold, twisted Dirac operator

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