
Minimal Maslov number of R -spaces canonically embedded in Einstein-Kähler C -spaces

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An R -space is a compact homogeneous space obtained as an orbit of the isotropy representation of a Riemannian symmetric space. It is known that each R -space has the canonical embedding into a Kähler C -space as a real form which is a compact embedded totally geodesic Lagrangian submanifold. The minimal Maslov number of Lagrangian submanifolds in symplectic manifolds is an invariant under Hamiltonian isotopies and very fundamental to the study of the Floer homology for intersections of Lagrangian submanifolds. In this talk we provide a Lie theoretic formula for the minimal Maslov number of R -spaces canonically embedded in Einstein-Kähler C -spaces and discuss several examples of the calculation by the formula.

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