21

- (
  - ○
  - ○ 19 3 16 16:30 17:30

The n-dimensional complex hyperquadric is a compact complex algebraic hypersurface defined by the quadratic equation in the \((n+1)\)-dimensional complex projective space, which is isometric to the real Grassmann manifold of oriented 2-dimensional vector subspaces of the \((n+2)\)-dimensional Euclidean space and a compact Hermitian symmetric space of rank 2.

In this talk we discuss properties of compact Lagrangian submanifolds in complex hyperquadrics obtained as the images of the Gauss map of isoparametric hypersurfaces and homogeneous hypersurfaces in the unit spheres. From this viewpoint we provide a classification theorem of compact homogeneous Lagrangian submanifolds in complex hyperquadrics by using the moment map technique. We determine the Hamiltonian stability of compact minimal Lagrangian submanifolds embedded in complex hyperquadrics which are obtained as Gauss images of isoparametric hypersurfaces in spheres with \(g\; (=1,2,3)\) distinct principal curvatures.
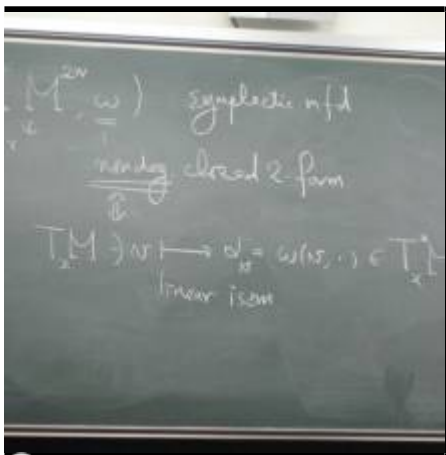
.lg-outer.lg-pull-caption-up.lg-thumb-open .lg-sub-html {bottom:80px;}

50 images