

Hideyuki ISHI

**Equivariant holomorphic line bundles over a bounded
homogeneous domain**

Abstract. Let D be a bounded homogeneous domain and G a split solvable Lie group acting on D simply transitively. We shall see that G -equivariant holomorphic line bundles L over D are parametrized by one-dimensional representations χ of G as $L = L_\chi$. We shall also determine all χ for which the representation π_χ of G defined naturally on the space $\Gamma_{\text{hol}}(L_\chi)$ is unitarizable. The classification of such unitary representation π_χ will be also given.