CR MAPS BETWEEN BOUNDARIES OF FLAG DOMAINS

ABSTRACT. Flag domain is an open orbit of a real form G_0 in a flag manifold G/Q. In this talk, we study geometric structures of SU(q, p) orbits in a flag manifold for $G = SL(n, \mathbb{C})$ with $n \leq q \leq p$. Then we introduce a differential geometric method to study CR structure on the boundary components of open orbits as geometric structures preserved by proper holomorphic maps between flag domains which extend smoothly to an open piece of a boundary component.