

VIRTUAL EAST-WEST SCV SEMINAR

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LEVI-FLAT CR STRUCTURES ON COMPACT LIE GROUPS

In this talk, I will discuss how to compute the cohomology of a left-invariant CR structure on a compact Lie group. This is a generalization of a result of Pittie. Pittie proved that the Dolbeault cohomology of all left-invariant complex structures on compact Lie groups can be computed by looking at the Dolbeault cohomology induced on a conveniently chosen maximal torus. We use the algebraic classification of left-invariant CR structures of maximal rank on compact Lie groups due to Charbonnel and Khalgui to generalize Pittie's result to left-invariant Levi-flat CR structures of maximal rank on compact Lie groups.
