

April 15, 2024

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*Rigidity of locally Hermitian symmetric
rank one manifolds of infinite volume*

We address G.D. Mostow, L. Bers and S.L. Krushkal questions on uniqueness of conformal or spherical CR structures on the sphere at infinity of non-compact symmetric rank one spaces X compatible with the action of a discrete isometry group G (which is crucial for non-triviality of deformations of X/G). We construct a class of non-rigid discrete isometry groups G whose quotients X/G have infinite volumes, the limit set $\Lambda(G) \subset \partial_\infty X$ could be the whole sphere at infinity and whose non-trivial deformations are induced by equivariant homeomorphisms of the symmetric space (possibly Hermitian) with bounded distortion. This non-rigidity is related to non-ergodic dynamics of our discrete isometry group actions on the limit set $\Lambda(G)$ which could be the whole sphere at infinity.

SCIENTIFIC SEMINAR

“DIFFERENTIAL GEOMETRY AND APPLICATIONS”

headed by Academician of RAS Anatoly T. Fomenko

The seminar takes place online in ZOOM on Mondays
from 4:45 p.m. to 6:20 p.m. (Moscow time)

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