

Characterization of domains in C^{∞} by their noncompact automorphism groups

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Abstract: In this paper, the characterization of domains in C^{∞} by their non-compact automorphism groups are given.

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References:

- Bedford, E., Pinchuk, S., Domains in C^2 with noncompact groups of automorphisms (1989) Math. USSR Sbornik., 63, pp. 141-151
- Bedford, E., Pinchuk, S., Domains in C^{n+1} with noncompact automorphism group (1991) J. Geom. Anal., 1, pp. 165-191
- Bedford, E., Pinchuk, S., Domains in C^2 with noncompact automorphism groups (1998) Indiana Univ. Math. Journal, 47, pp. 199-222
- Bell, S., Local regularity of C.R. homeomorphisms (1988) Duke Math. J., 57, pp. 295-300
- Berteloot, F., Attraction de disques analytiques et continuité Holdérienne d'applications holomorphes propres, Topics in Compl (1995) Anal., Banach Center Publ., pp. 91-98
- Berteloot, F., Characterization of models in C^2 by their automorphism groups (1994) Internat. J. Math., 5, pp. 619-634
- Berteloot, F., Principe de Bloch et Estimations de la Metrique de Kobayashi des Domaines de C^2 (2003) J. Geom. Anal. Math., 1, pp. 29-37

- Catlin, D., Estimates of invariant metrics on pseudoconvex domains of dimension two (1989) *Math. Z.*, 200, pp. 429-466
- Cho, S., A lower bound on the Kobayashi metric near a point of finite type in C^n (1992) *J. Geom. Anal.*, 2-4, pp. 317-325
- Cho, S., Boundary behavior of the Bergman kernel function on some pseudoconvex domains in C^n (1994) *Trans. of Amer. Math. Soc.*, 345, pp. 803-817
- D'Angelo, J.P., Real hypersurfaces, orders of contact, and applications (1982) *Ann. Math.*, 115, pp. 615-637
- Greene, R., Krantz, S., Biholomorphic self-maps of domains (1987) *Lecture Notes in Math*, 1276, pp. 136-207
- Isaev, A., Krantz, S., Domains with non-compact automorphism group: A survey (1999) *Adv. Math.*, 146, pp. 1-38
- Kobayashi, S., (1998) *Hyperbolic Complex Spaces*, Grundlehren der mathematischen Wissenschaften, 318. , Springer-Verlag
- Narasimhan, R., (1971) *Several Complex Variables*, Chicago Lectures in Mathematics, , University of Chicago Press
- Pinchuk, S., The scaling method and holomorphic mappings (1991) *Proc. Symp. Pure Math.*, 52. , Part 1 Amer. Math. Soc
- Thai, D.D., Minh, T.H., Generalizations of the theorems of Cartan and Greene-Krantz to complex manifolds (2004) *Illinois Jour. of Math.*, 48, pp. 1367-1384
- Wong, B., Characterization of the ball in C^n by its automorphism group (1977) *Invent. Math.*, 41, pp. 253-257
- Rosay, J.P., Sur une caractérisation de la boule parmi les domaines de C^n par son groupe d'automorphismes (1979) *Ann. Inst. Fourier*, 29 (4), pp. 91-97