

LINEAR INVARIANT FAMILIES ON THE UNIT POLYDISC

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REFERENCES

- [1] BARNARD, R.W. AND FITZGERALD, C.H. AND GONG, S., *A distortion theorem for biholomorphic mappings in \mathbf{C}^2* , Trans. Amer. Math. Soc., **344** (1994), 907–924.
- [2] GONG, S., Convex and Starlike Mappings in Several Complex Variables, Kluwer Acad. Publ., 1998.
- [3] GRAHAM, I. AND KOHR, G., *An extension theorem and subclasses of univalent mappings in several complex variables*, Complex Variables, **47**(2002), 59–72.
- [4] HAMADA, H. AND KOHR, G., *Linear invariance of locally biholomorphic mappings in Hilbert spaces*, Complex Variables, **47**(2002), 277–289.
- [5] PFALTZGRAFF, J.A., *Distortion of locally biholomorphic maps of the n -ball*, Complex Variables, **33** (1997), 239–253.
- [6] PFALTZGRAFF, J.A. AND SUFFRIDGE, T.J., *Linear invariance, order and convex maps in \mathbf{C}^n* , Complex Variables, **40** (1999), 35–50.
- [7] PFALTZGRAFF, J.A. AND SUFFRIDGE, T.J., *An extension theorem and linear invariant families generated by starlike maps*, Ann. Univ. Mariae-Curie Skłodowska, Sect.A. **53** (1999), 193–207.
- [8] PFALTZGRAFF, J.A. AND SUFFRIDGE, T.J., *Norm order and geometric properties of holomorphic mappings in \mathbf{C}^n* , J. Analyse Math., **82**(2000), 285–313.
- [9] POMMERENKE, C., *Linear-invariante familien analytischer funktionen I*, Math. Annalen, **155** (1964), 108–154.
- [10] POMMERENKE, C., *Linear-invariante familien analytischer funktionen II*, Math. Annalen, **156** (1964), 226–262.
- [11] ROPER, K. AND SUFFRIDGE, T.J., *Convex mappings on the unit ball of \mathbf{C}^n* , J. Analyse Math., **65** (1995), 333–347.
- [12] ROPER, K. AND SUFFRIDGE, T.J., *Convexity properties of holomorphic mappings in \mathbf{C}^n* , Trans. Amer. Math. Soc., **351**, 5 (1999), 1803–1833.
- [13] SUFFRIDGE, T.J., *The principle of subordination applied to functions of several variables*, Pacif. J. Math., **33**(1970), 241–248.
- [14] SUFFRIDGE, T.J., *Starlike and convex maps in Banach spaces*, Pacif. J. Math., **46** (1973), 575–589.
- [15] SUFFRIDGE, T.J., *Starlikeness, convexity and other geometric properties of holomorphic maps in higher dimensions*, Lecture Notes in Math., **599** (1976), 146–159.

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