Publ. Mat. **45** (2001), 69–77

PROPER HOLOMORPHIC MAPPINGS BETWEEN RIGID POLYNOMIAL DOMAINS IN $\mathbb{C}^{n+1}$

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Abstract

We describe the branch locus of proper holomorphic mappings between rigid polynomial domains in $\mathbb{C}^{n+1}$. It appears, in particular, that it is controlled only by the first domain. As an application, we prove that proper holomorphic self-mappings between such domains are biholomorphic.

2000 *Mathematics Subject Classification.* 32H35.
Key words. Proper holomorphic mappings, rigid polynomial nondegenerate pseudoconvex domains.