

Kato, Masahide

Examples on an extension problem of holomorphic maps and a holomorphic 1- dimensional foliation. (English) [Zbl 0718.32014](#)

[Tokyo J. Math.](#) 13, No. 1, 139-146 (1990).

Let $\partial B(\epsilon) = \{z \in \mathbb{C}^2 : 1 - \epsilon < \|z\| < j1\}$. The author constructs:

(1) a complex 3-dimensional manifold M and a holomorphic mapping $f: \partial B(\epsilon) \rightarrow M$ such that for each point z with $\|z\| = 1 - \epsilon$ there is no neighbourhood W of z such that f extends holomorphically to $W \cup \partial B(\epsilon)$;

(2) a 1-dimensional holomorphic foliation on $P(TM)$ which shows that a theorem of Nishino is not true in higher codimensions.

Reviewer: [M.Jarnicki \(Kraków\)](#)

MSC:

[32D15](#) Continuation of analytic objects in several complex variables

[32A40](#) Boundary behavior of holomorphic functions of several complex variables

Cited in **5** Documents

Keywords:

[holomorphic extension](#); [boundary behaviour](#); [holomorphic mapping](#); [1- dimensional holomorphic foliation](#); [theorem of Nishino](#)

Full Text: [DOI](#)