SOME REMARKS ON INDICES
OF HOLOMORPHIC VECTOR FIELDS

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Abstract

One can associate several residue-type indices to a singular point of a two-dimensional holomorphic vector field. Some of these indices depend also on the choice of a separatrix at the singular point. We establish some relations between them, especially when the singular point is a generalized curve and the separatrix is the maximal one. These local results have global consequences, for example concerning the construction of logarithmic forms defining a given holomorphic foliation.