

Two p-adic meromorphic functions sharing a few small functions I.M.

A survey and additional properties

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Abstract Let \mathbb{K} be a complete ultrametric algebraically closed field of characteristic 0, let D be the open disk $\{x \in \mathbb{K} \mid |x| < R\}$ and let $E = \mathbb{K} \setminus D$. Let f, g be two meromorphic functions in \mathbb{K} (resp. two unbounded meromorphic functions in D , resp. two meromorphic functions in E) sharing 7 small meromorphic functions in the same set (ignoring multiplicity). Then $f = g$. Moreover, if f and g are analytic in \mathbb{K} (resp. in D , resp. in E), and share 3 small analytic functions, other than the constant ∞ , (ignoring multiplicity), then $f = g$.