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SOME PROPERTIES OF MEROMORPHIC FUNCTIONS CONCERNING SHARED–SETS

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Abstract. Using Nevanlinna's value distribution theory, we study shared-set problems of meromorphic functions and prove that there exist three finite sets S_1 $(\sharp(S_1)=1)$, S_2 $(\sharp(S_2)=1)$ and S_3 $(\sharp(S_3)=5)$ such that any two meromorphic functions f and g sharing S_j $(j=1,2,3)$ must be identical. Our results are improvements of those of former authors and the complement of Ref. [W. Lin and H. X. Yi, Uniqueness theorems for meromorphic functions that share three sets. Complex Variables, **44** (2003), 315–327.]. In addition, we show the accuracy of the results by giving some examples.

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