

1094-30-199

Mario Bonk, Juha Heinonen and Pietro Poggi-Corradini*, Department of Mathematics,
Manhattan, KS 66506. *Singularities for the inverse of a quasiregular mapping*. Preliminary report.

We recall the classical notion of singularities for the inverse of a meromorphic function in the complex plane, and describe three known results: Heins's Theorem on direct singularities, the Denjoy-Carleman-Ahlfors Theorem on asymptotic values, and the Bergweiler-Eremenko Theorem on critical points and indirect singularities. We then discuss generalizations of these results to the context of quasiregular mappings in higher-dimensional Euclidean space. The most interesting aspect being the several ways one might prove a "localized" version of the Rickman-Picard Theorem. (Received August 23, 2013)