

1078-58-348

Massimo Ferrarotti, Elisabetta Fortuna and Leslie Charles Wilson*

(les@math.hawaii.edu), University of Hawaii, Department of Mathematics, 2565 McCarthy Mall, Honolulu, HI 96822. *Algebraic approximation of semianalytic sets*. Preliminary report.

Two sets A and B are said to be s -equivalent at x if $H(A \cap S_r, B \cap S_r) = o(r^s)$, where S_r is the sphere of radius r centered at x , and H is the Hausdorff distance. We prove that a semianalytic set is, for each x and each s , s -equivalent to some algebraic variety at x . (Received December 13, 2011)