

Title: Metric properties and exceptional sets of beta-continued fractions of Laurent series

Author(s): Mei-Ying Lü

In 2010, M. JELLALI et al. introduced a new kind of continued fractions algorithm of Laurent series, called β -continued fractions. In this paper, we discuss metric properties of the partial quotients $\{e_n(x), n \geq 1\}$ occurring in β -continued fractions, and for the β -continued fractions with sequences of partial quotients and the β -continued fractions whose sum of degrees of partial quotients tends to infinity with generally functional growth rate, we give their Hausdorff dimensions.

Address:

Mei-Ying Lü Department of Mathematics Chongqing Normal University Chongqing, 401331 P.R. China