A SPECIAL CASE OF RATIONAL θS FOR TERMINATING θ-EXPANSIONS

Santanu Chaktaborty

Abstract. There have been quite a few generalizations of the usual continued fraction expansions over the last few years. One very special generalization deals with θ-continued fraction expansions or simply θ-expansions introduced by Bhattacharya and Goswami [1]. Chakraborty and Rao [3] subsequently did elaborate studies on θ-expansions in their paper. They also obtained the unique invariant measure for the Markov process associated with the generalized Gauss transformation that generated θ-expansions for some special θs. In this work, we investigate an interesting question regarding the nature of θs for θ-expansion of $\frac{1}{\theta}$ terminating at stage two, particularly with θ rational.

Full text

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Santanu Chaktaborty

The University of Texas-Pan American,

1201 West University, Edinburg, Tx, 78541, USA.

e-mail: schakraborty@utpa.edu

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