ON KNEADING DETERMINAT IN TWO VARIABLES

JOZEF BOBOK

Let f be a unimodal interval map given for a > 0, b > 1 by the formula

$$f_{a,b}(x) := \begin{cases} ax + \frac{a+b-ab}{b}, \ x \in [0, 1-\frac{1}{b}], \\ b-bx, \ x \in [1-\frac{1}{b}, 1]. \end{cases}$$

We assume the values a, b to define the map $f_{a,b}$ topologically mixing. We study the properties of the kneading determinant of f as a function of two variables.

References

- J. Bobok and S. Roth, The infimum of Lipschitz constants in the conjugacy class of an interval map, Proc. Amer. Math. Soc. 147(1)(2019), 255-269.
- S. Ito, S. Tanaka and H. Nakada, On unimodal linear transformations and chaos II, Tokyo J. Math. 2(2)(1979), 241-259.

ACKNOWLEDGEMENT

The author was supported by the European Regional Development Fund, project No. CZ 02.1.01/0.0/0.0/16_019/0000778.

DEPARTMENT OF MATHEMATICS, FACULTY OF CIVIL ENGINEERING, CZECH TECHNICAL UNI-VERSITY IN PRAGUE, THÁKUROVA 7, 166 29, PRAGUE 6, CZECH REPUBLIC Email address: jozef.bobok@cvut.cz