

1152-37-110

Takayuki Watanabe* (watanabe.takayuki.43c@st.kyoto-u.ac.jp), Grad. Sch. of Human and Environmental Studies, Kyoto University, Yoshida-nihonmatsu-cho, Sakyo-ku, Kyoto 606-8501, Japan. *Non-i.i.d. random dynamical systems of rational maps.*

We consider non-i.i.d. random holomorphic dynamical systems whose choice of maps depends on “Markovian rules”. We show that generically, such a system is stable on average or chaotic with full Julia set. This generalizes a result for i.i.d. random dynamical systems of rational maps. We also talk about differences between i.i.d. and non-i.i.d. random dynamical systems. This is a joint work with Hiroki Sumi (Kyoto University), and some results of this talk are included in the paper “H. Sumi and T. Watanabe, Non-i.i.d. random holomorphic dynamical systems and the probability of tending to infinity”, <https://arxiv.org/abs/1810.09922> which is to appear in *Nonlinearity*. (Received August 28, 2019)