

Dynamical Systems Seminar

Date. April 4th, 14h30 (Friday)

Place. Room FC1.031

Speaker. Odaudu Etubi (Centro de Matemática da Universidade do Porto)

Title. Modulus of continuity of invariant densities and entropies for piecewise expanding maps

Abstract.

Using a deterministic perturbation result established by Galatolo and Lucena [1], we obtain quantitative estimates on the continuity of the invariant densities and entropies of the physical measures for a one parameter family of piecewise expanding maps. We apply these results to a family of two-dimensional tent maps.

There will be a coffee break after the seminar.

- [1] S. Galatolo, R. Lucena, Spectral gap and quantitative statistical stability for systems with contracting fibers and Lorenz-like maps, *Discrete and Continuous Dynamical Systems* **40**, 3 (2020), 1309–1360