BRIEF SURVEY ON THE TOPOLOGICAL ENTROPY

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Abstract. In this paper we give a brief view on the topological entropy. The results here presented are well known to the people working in the area, so this survey is mainly for non–experts in the field.

Contents

1. **Introduction.** We do not try to be exhaustive on all the result about the topological entropy, thus here we do not consider or do not put too much attention on its relation with the metric entropy, the local entropy, Lyapunov exponents, etc, and we do not say anything about flows or other actions, nor about generic situations. Also in the case of surfaces there are more results available, because one can use Nielsen–Thurston theory for the study of the global dynamics of homeomorphism, see for example [17], [18], but we want to keep our survey short and relatively easy to read, and covering all these other aspects we shall need another survey. The results will be presented without proofs, but providing explicit references about them.

The paper has two parts well separated.

The first is dedicated to the topological entropy in one–dimensional spaces, more precisely on the interval, the circle and a graph. For this part the main reference

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