



DYNAMICAL SYSTEMS SEMINAR

Compactification of Spaces and Dynamics

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Abstract. This lecture is directed to all who have curiosity and questions about compactifications of spaces and dynamics. We will show how any compactification, in particular, the famous compactifications of Stone-Cech and of Alexandrov, can be seen as an embedding into a cube and also explain how this approach helps to answer questions about compactification of spaces and dynamics. We will present the proofs of the main results and also formulate some research questions and some conjectures about the relation between entropy and compactification of dynamics. The prerequisite for this lecture is general topology, particularly the product topology and Tychonoff's theorem, which can be found, for example, in [1] or [2].

References

- [1] John L. Kelley. *General Topology*. Graduate Texts in Mathematics (27). Springer-Verlag. New York, 1975.
- [2] Gerald B. Folland. *Real Analysis: Modern Techniques and Their Applications*. Second Edition. Wiley. New York, 1999.