

## Tail invariant measures on Bratteli diagrams and their generalizations

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During the last decades, Bratteli diagrams turned out to be a very powerful tool for the study of dynamical systems not only on a measure space but also on Cantor and Borel spaces. This is due to the fact that homeomorphisms of a Cantor space and Borel automorphisms of a standard Borel space can be represented as Vershik maps acting on the path spaces of corresponding Bratteli diagrams. Various properties of the transformations become more transparent when one deals with corresponding Bratteli-Vershik dynamical systems. In particular, this observation concerns invariant measures and their supports, minimal components of the transformation, structure of its orbits, etc. We will discuss some natural methods for the study of the set of invariant measures in Cantor and Borel dynamics based on the structure of the underlying diagram. These methods also work even for Bratteli diagrams that do not support any Vershik map. We consider the so-called generalized Bratteli diagrams in Borel dynamics, give sufficient conditions of unique ergodicity for such diagrams and consider the supports of tail invariant measures. The talk is based on a joint work with Sergey Bezuglyi, Palle E.T. Jorgensen and Shrey Sanadhya.