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*Bratteli-Vershik models for partial actions of  $\mathbb{Z}$*

Herman, Putnam, and Skau proved that given a Cantor minimal system  $(X, f)$  one can construct a simple ordered Bratteli diagram with unique max and min paths whose Vershik map is conjugate to  $(X, f)$ . They also proved that any two diagrams constructed from  $(X, f)$  are equivalent. Of course there are simple ordered Bratteli diagrams which do not have unique max and min paths, and here the Vershik map is still a minimal homeomorphism between open subsets of the path space. We prove the converse of this statement, that given a minimal homeomorphism  $h: U \rightarrow V$  between open proper subsets of the Cantor set, there exists an ordered Bratteli diagram whose Vershik map is conjugate to  $h$ , and that any two such diagrams are equivalent. This is joint work with Thierry Giordano and Daniel Gonçalves.