From invariant ergodic measures to indecomposable characters on full
groups.

Given a measure-preserving group action (μ, X, G) one can associate to it a
character (positive-definite conjugacy invariant function) on G by

$$\chi(g) = \mu(\{x \in X : gx = x\}), g \in G. \tag{1}$$

Anatoly Vershik suggested that for a "sufficiently rich" simple group G every
indecomposable character (extreme point in the space of characters) on G
can be obtained by formula (1) from some ergodic measure-preserving action
of G.

Given a Cantor minimal system one can associate to it two important
groups of actions: the topological full group of the system and the approxi-
mately finite group of the related Bratteli diagram. In my talk I will explain
the correspondence (1) for these groups and outline the proof of a general-
ization of Vershik's conjecture for them. The talk is based on an ongoing
joint work with Konstantin Medynets.