1163-05-198 **Andrew Beveridge*** (abeverid@macalester.edu), Department of Mathematics, 1600 Grand Avenue, St Paul, MN 55105, and **Ian Calaway** (icalaway@stanford.edu). *Constructing Admissible Voter Preferences with the Voter Basis.*

When making simultaneous decisions, our preference for the outcomes on one subset can depend on the outcomes on a disjoint subset. In referendum elections, this gives rise to the separability problem, where a voter must predict the outcome of one proposal when casting their vote on another. A set $S \subset [n]$ is separable for preference order $\succeq$ when our ranking of outcomes on S is independent of outcomes on its complement $[n] \backslash S$. The admissibility problem asks which subsets $S \subset [n]$ can arise as the collection of separable subsets for some preference order. We introduce the 2^n-dimensional voter basis, and use it to construct voter preferences whose Hasse diagram of separable sets has a tree structure, or is closed under intersections and unions. (Received August 26, 2020)