1135-03-1699   **Paul B. Larson*** (`larsonpb@miamioh.edu`), Department of Mathematics, Miami University, Oxford, OH 45056, and **Jindrich Zapletal**. *Canonical models for fragments of the Axiom of Choice.*

We develop technology for investigation of natural forcing extensions of the model $L(\mathbb{R})$ which satisfy such statements as "there is a nonprincipal ultrafilter on the integers", "there is a total selector for the Vitali equivalence relation", "there exists an infinite MAD family" or "there exists a Hamel basis". The technology reduces many questions about ZF implications between consequences of the Axiom of Choice to natural ZFC forcing problems. (Received September 24, 2017)