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Ian Alevy* (ian.alevy@rochester.edu), University of Rochester, Department of Mathematics, Rochester, NY 14627, and **Richard Kenyon** (richard.kenyon@yale.edu) and **Ren Yi** (renyi@math.brown.edu). *A Family of Minimal and Renormalizable Rectangle Exchange Maps.*

A *domain exchange map* (DEM) is a dynamical system defined on a smooth Jordan domain which is a piecewise translation. We explain how to use cut-and-project sets to construct minimal DEMs. Specializing to the case in which the domain is a square and the cut-and-project set is associated to a Galois lattice, we construct an infinite family of DEMs in which each map is associated to a PV number. We develop a renormalization scheme for these DEMs. Certain DEMs in the family can be composed to create multistage, renormalizable DEMs. (Received August 15, 2019)