Lucas Kramer and Ryan R. Martin* (rymartin@iastate.edu), Department of Mathematics, Iowa State University, 396 Carver Hall, Ames, IA 50011, and Michael Young. Recent progress on diamond-free families.

In the Boolean lattice, a diamond is a subposet of four distinct subsets A, B, C, D such that $A \subset B, C$ and $D \subset B, C$. One of the most well-studied problems in extremal poset theory is determining the size of the largest diamond-free family in the n-dimensional Boolean lattice. We will discuss some recent progress on this problem. (Received September 14, 2014)