1067-42-1759 Dmitriy Bilyk, Xiaomin Ma and Jill Pipher* (jpipher@math.brown.edu), Box 1917, Department of Mathematics, Brown University, Providence, RI 02912, and Craig Spencer. Geometric discrepancy and lattice constructions.

We present some results in discrepancy theory in two dimensions in which certain rotations of the standard lattice are shown to have low discrepancy with respect to families of (rotated) rectangles. (Received September 21, 2010)