

## **Directional Discrepancy**

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We will discuss discrepancy with respect to families of rotated rectangles. The extremal cases of axis-parallel rectangles and rectangles rotated in all possible directions are well known, but we will consider intermediate sets of rotations. In particular, we will investigate discrepancy with respect to rectangles rotated by angles from a lacunary set of finite order or from a set with small Minkowski dimension. Connections with Diophantine approximation will also be explored. This is joint work with Dmitriy Bilyk, Xiaomin Ma, and Jill Pipher.