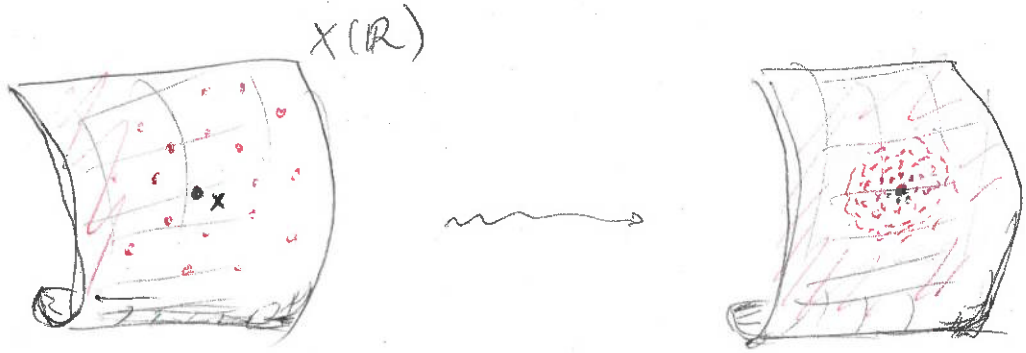
Local Distribution

$X/\mathbb{Q}$ smooth projective of dimension n.

$* \in X(\mathbb{R})$ smooth real manifold - assume of dim. n

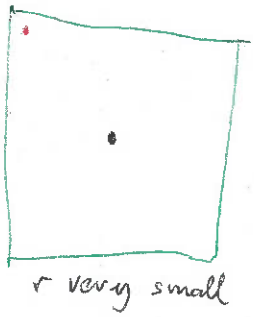


$y \in X(\mathbb{Q})$ $H(y) \leq B$

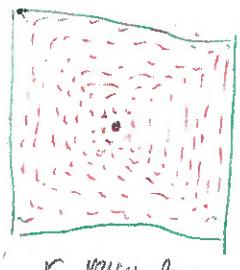
$y \in X(\mathbb{Q})$ $H(y) \leq 10B$

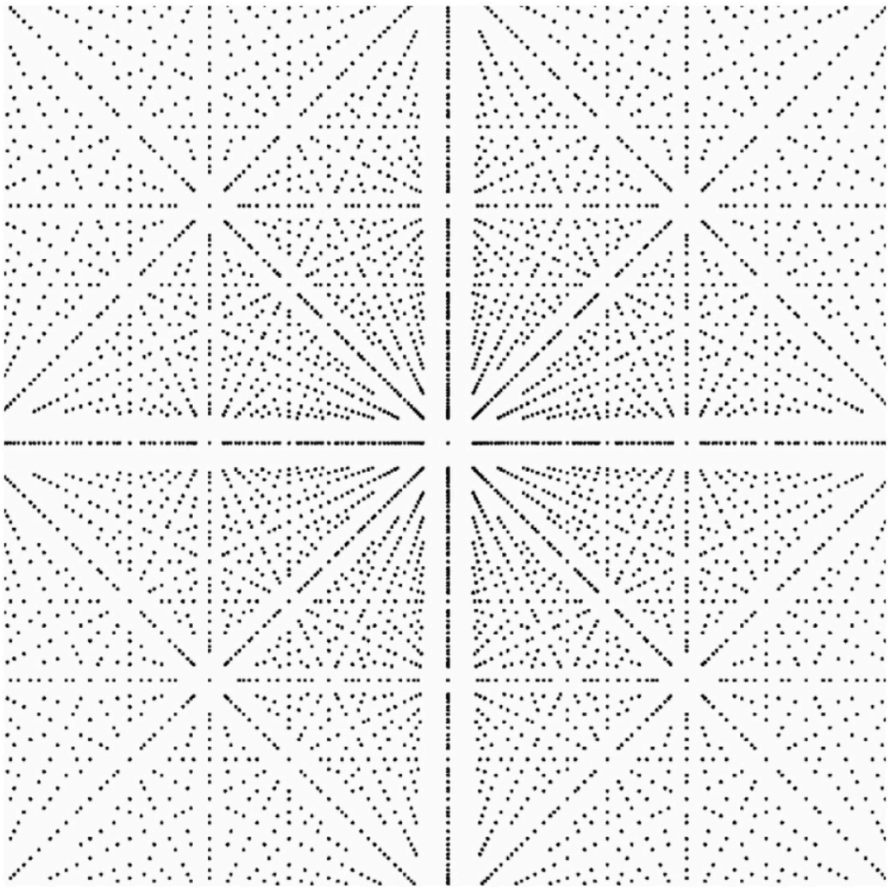
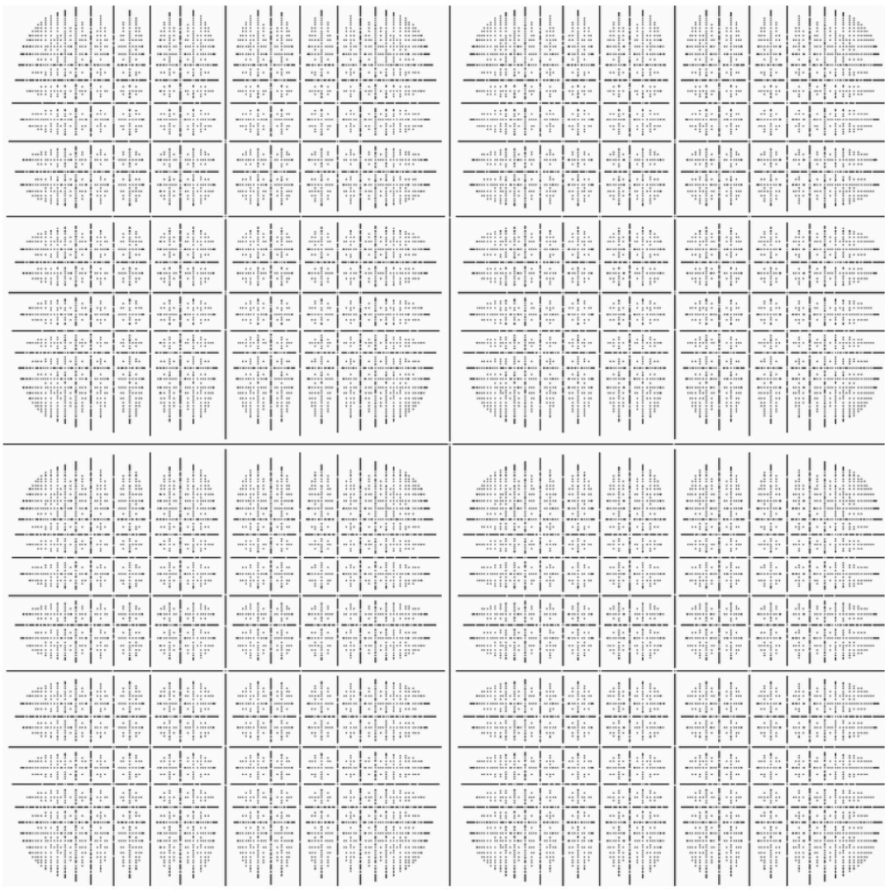
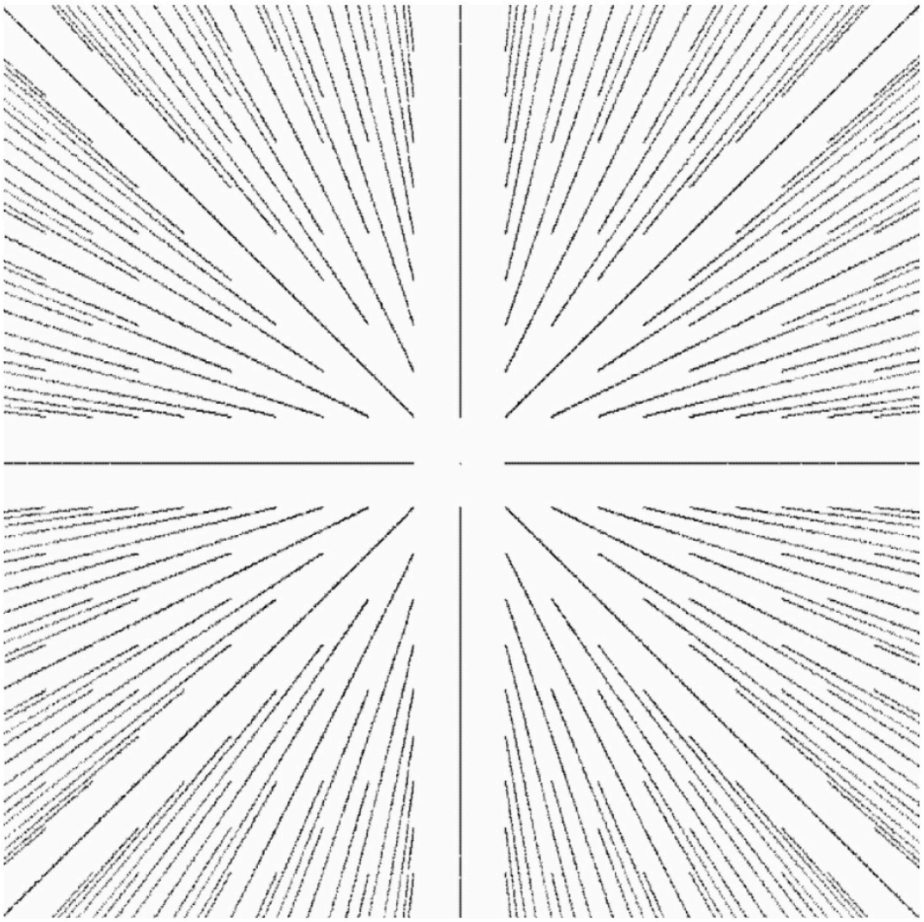
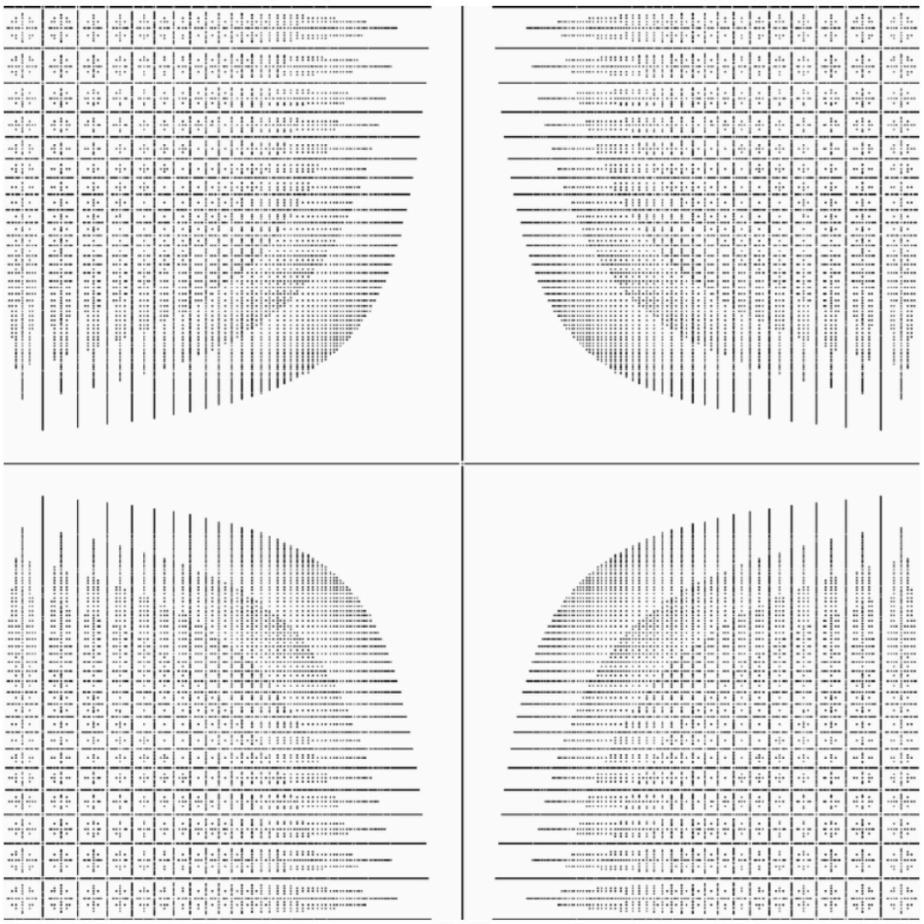
S ↓ project onto $T_x X \cong \mathbb{R}^n$, $* \mapsto 0$

↓ project onto $T_x X$ and "zoom in" by a factor $B^{1/r}$



r very small



r very large

r "mid range"