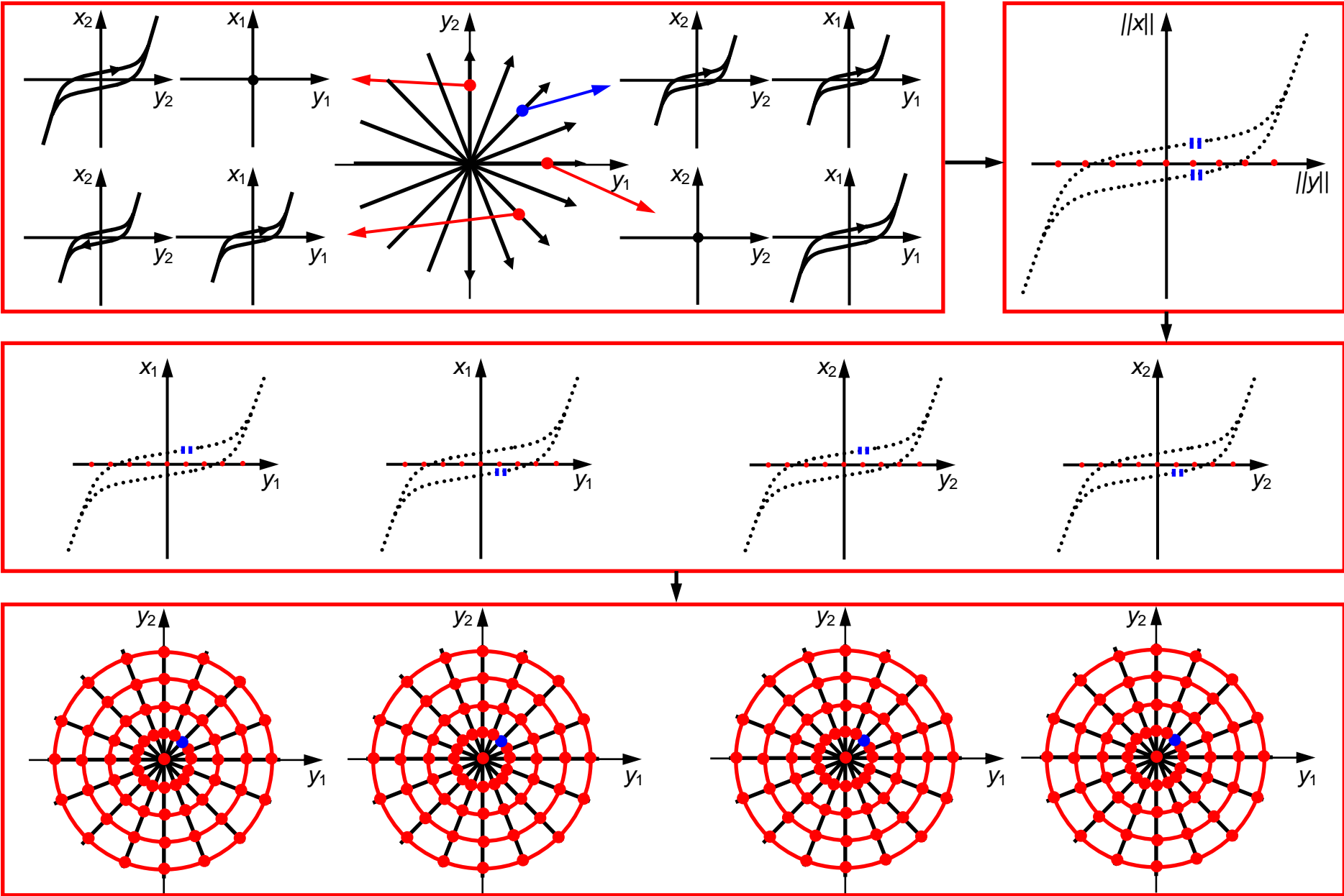
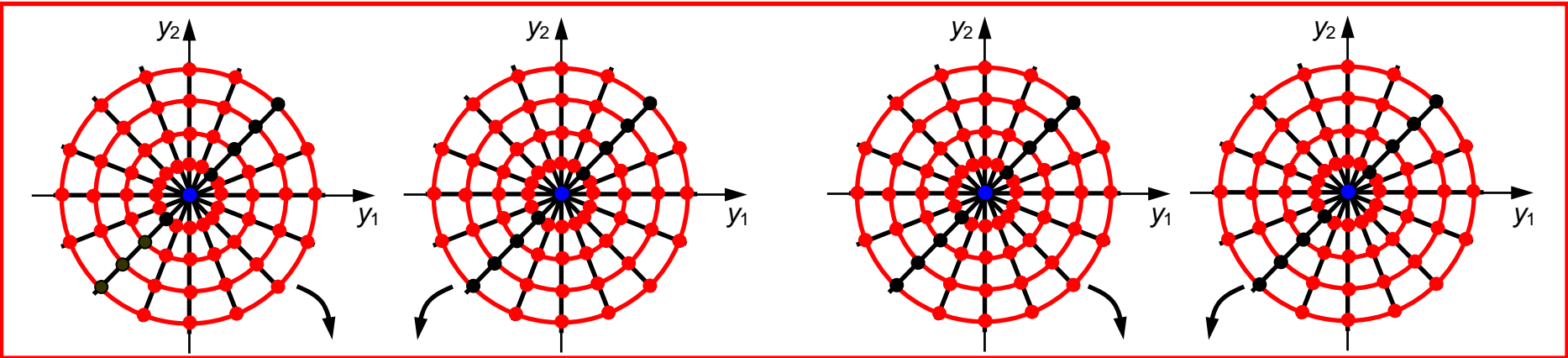


Design of Experiments & Data-Base Construction

Mapping of alternating loop measurements on regular polar grids

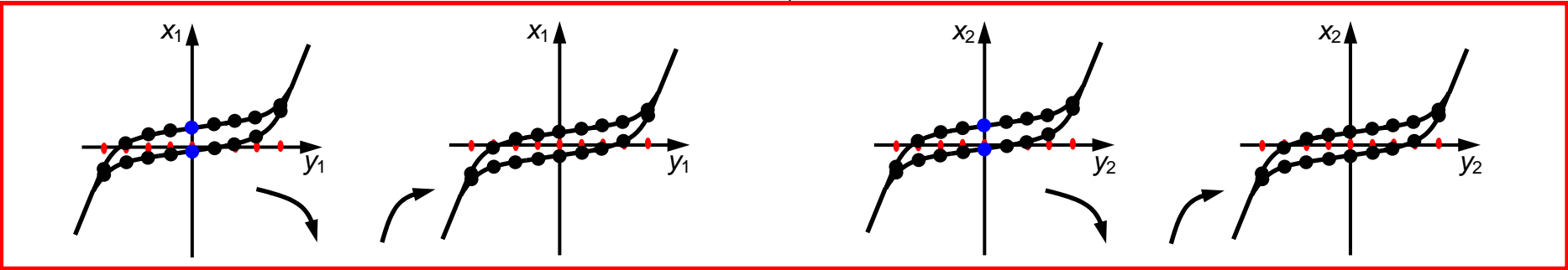


Offset compensation on regular polar grids



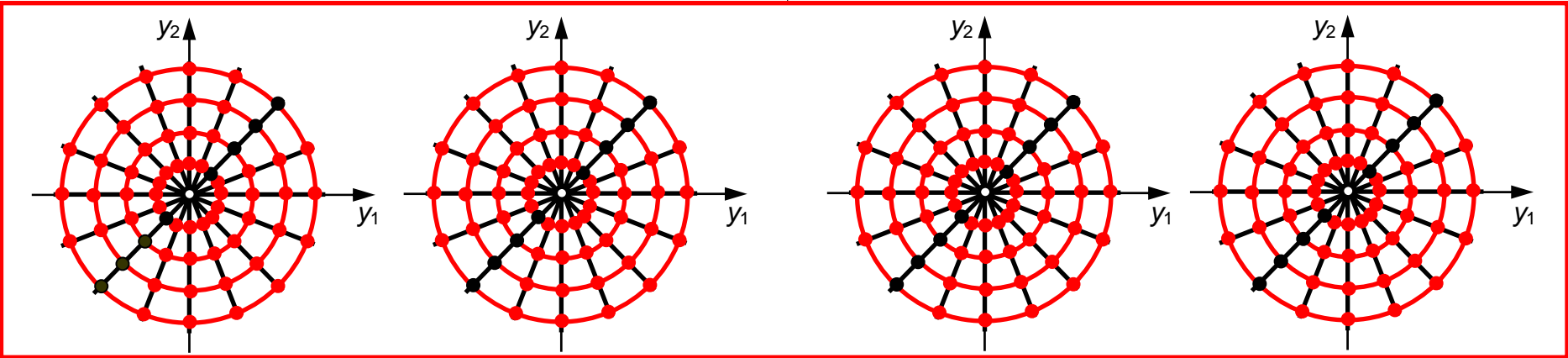
$$X_{1off} = (X_{10}^{up} + X_{10}^{down})/2$$

$$X_{2off} = (X_{20}^{up} + X_{20}^{down})/2$$

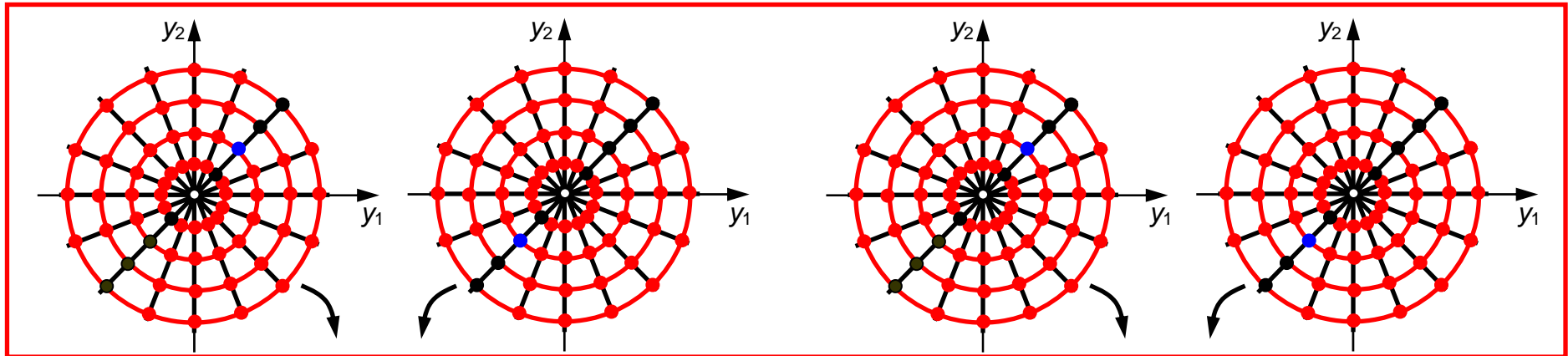


$$X_{1i} - X_{1off} = X_{1i}$$

$$X_{2i} - X_{2off} = X_{2i}$$

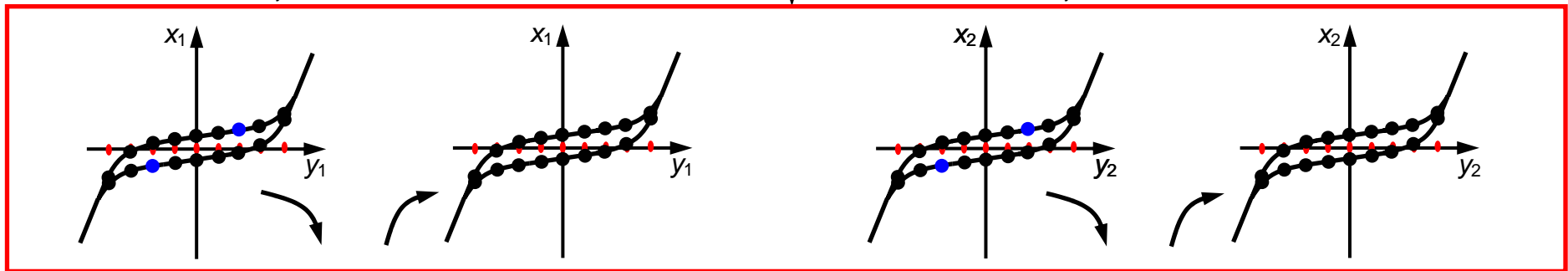


Point symmetrization on regular polar grids



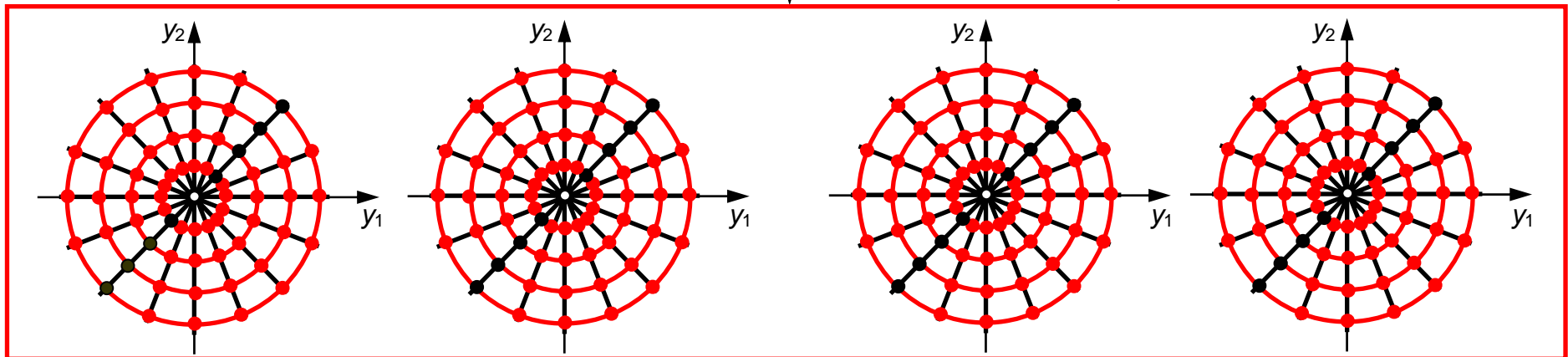
$$X_{1isym} = (X_{1i}^{up} - X_{1i}^{down})/2$$

$$X_{2isym} = (X_{2i}^{up} - X_{2i}^{down})/2$$

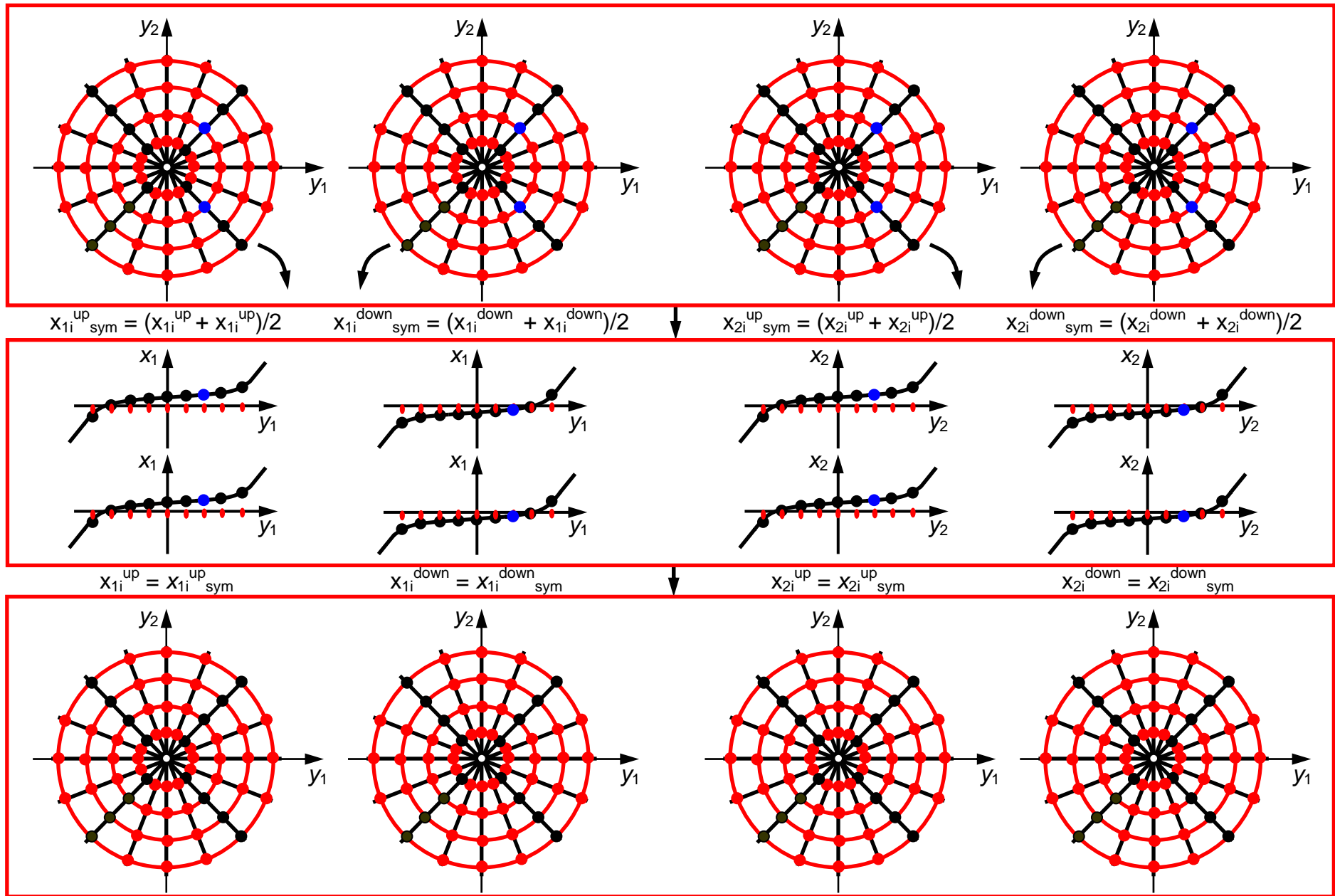


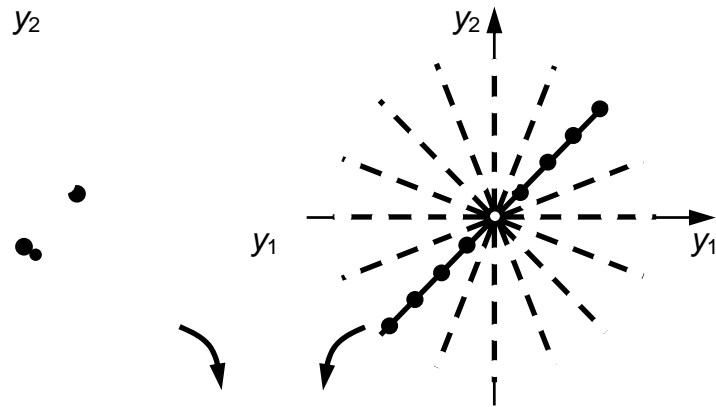
$$X_{1isym} = X_{1i}$$

$$X_{2isym} = X_{2i}$$



Axis symmetrization on regular polar grids





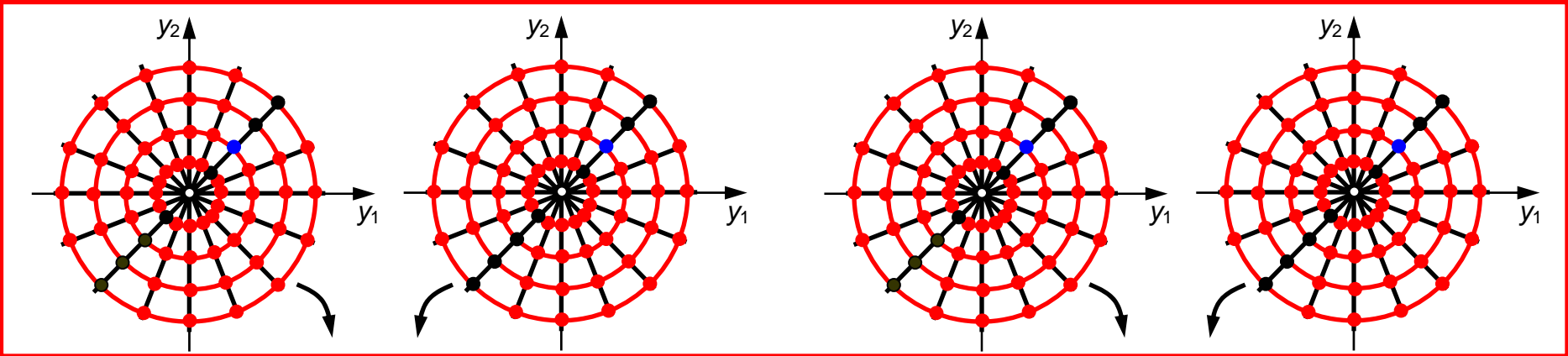
$$x^{\text{down}} = x_N^{\text{down}} + \Delta x_N^{\text{down}} / \Delta y_N \cdot (y - y_N)$$

$$y_{N+1} = y_N - (x_N^{\text{up}} - x_N^{\text{down}}) \cdot \Delta y_N / (\Delta x_N^{\text{up}} - \Delta x_N^{\text{down}}) \quad y_{-(N+1)} = -y_{N+1}$$

$$x_{N+1} = x_N^{\text{up}} + \Delta x_N^{\text{up}} / \Delta y_N \cdot (y_{N+1} - y_N)$$

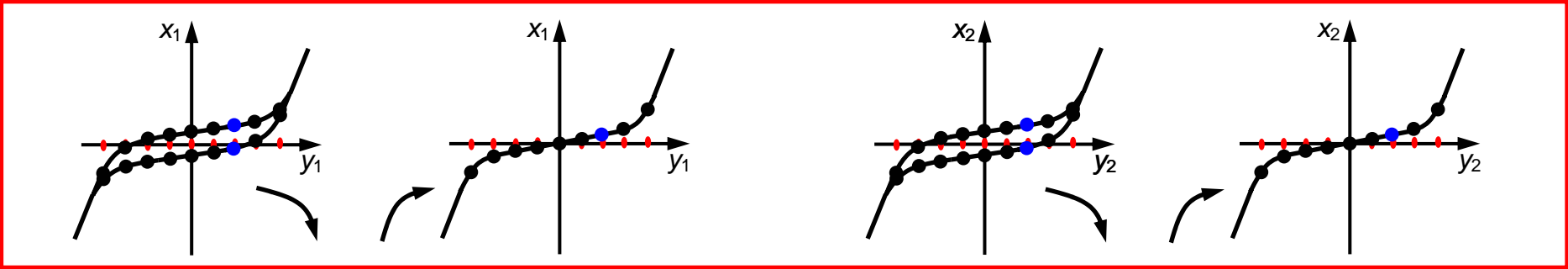
$$x_{-(N+1)} = -x_{N+1}$$

Anhysteretic characteristic on regular polar grids



$$X_{1ianh} = (X_{1i}^{up} + X_{1i}^{down})/2$$

$$X_{2ianh} = (X_{2i}^{up} + X_{2i}^{down})/2$$



$$X_{1i} = X_{1ianh}$$

$$X_{2i} = X_{2ianh}$$



Coercitive field characteristic on regular polar grids

