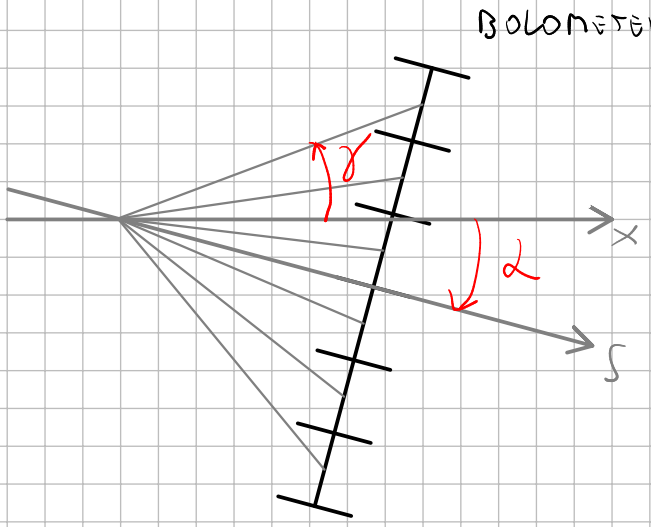
$$\begin{cases} Y = m_{OLX} X + c_{OLX} \\ Y = m_{OOC} X + c_{OOC} \end{cases} \longrightarrow$$

$$Y = \frac{c_{OOC}\, m_{OLX} - c_{OLX}\, m_{OOC}}{m_{OLX} - m_{OOC}}$$

$$X = \frac{c_{OOC} - c_{OLX}}{m_{OLX} - m_{OOC}}$$

IN GENERAL BOLOMETERS ARE ROTATED BY AN ANGLE α W.R.T. STANDARD POSITION (AXIS $\hat{\jmath}$ ALIGNED TO AXIS $\hat{x}$)



THE i-TH LINE OF SIGHT (LOS) HAS SLOPE

$$m_i = \tan(\gamma)$$

IN STANDARD POSITION: (OLX)

$$m_i' = (2n+1)\, m^*$$

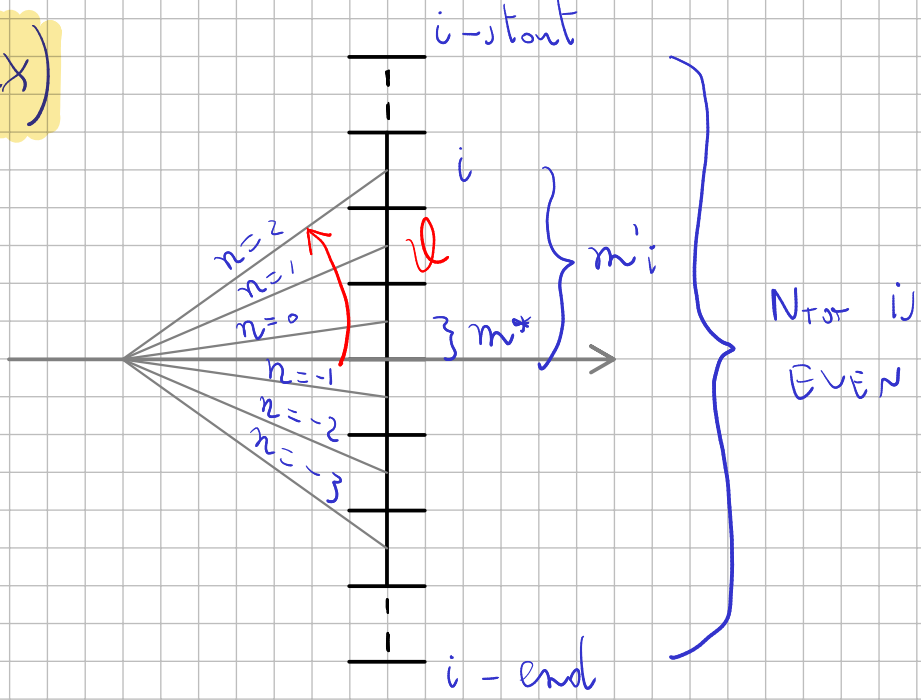
$$j = -n$$

$$m_i' = (-2j+1)\, m^*$$

$$j = i - i^* \longrightarrow \text{offset}$$

$$\boxed{m_i' = \left[-2\,(i - \text{offset}) + 1\right] m^*}$$

$$m_i' = \tan(\vartheta)$$



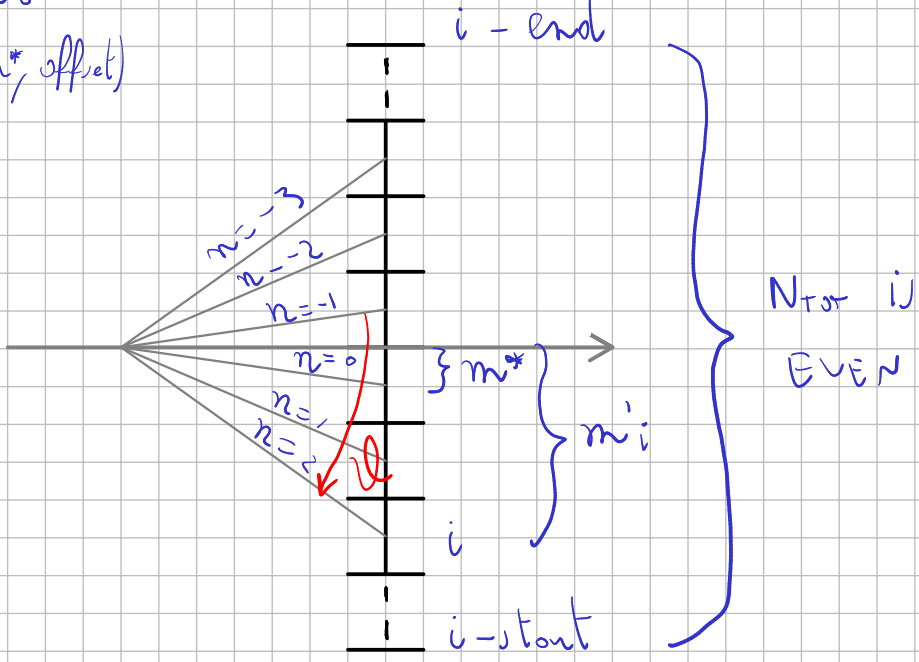
$$\Longrightarrow \quad m = \tan(\gamma)$$

$$= \tan(\vartheta + \alpha)$$

$$= \frac{\tan(\vartheta) + \tan(\alpha)}{1 - \tan(\vartheta)\tan(\alpha)}$$

$$= \frac{m' + m_\alpha}{1 - m' m_\alpha}$$

FOR DDC EVERYTHING IS FLIPPED BUT m_i' (m^*, offset) STAYS THE SAME



$$C = Y_{PH} - m X_{PH}$$

PH: PIN-HOLE