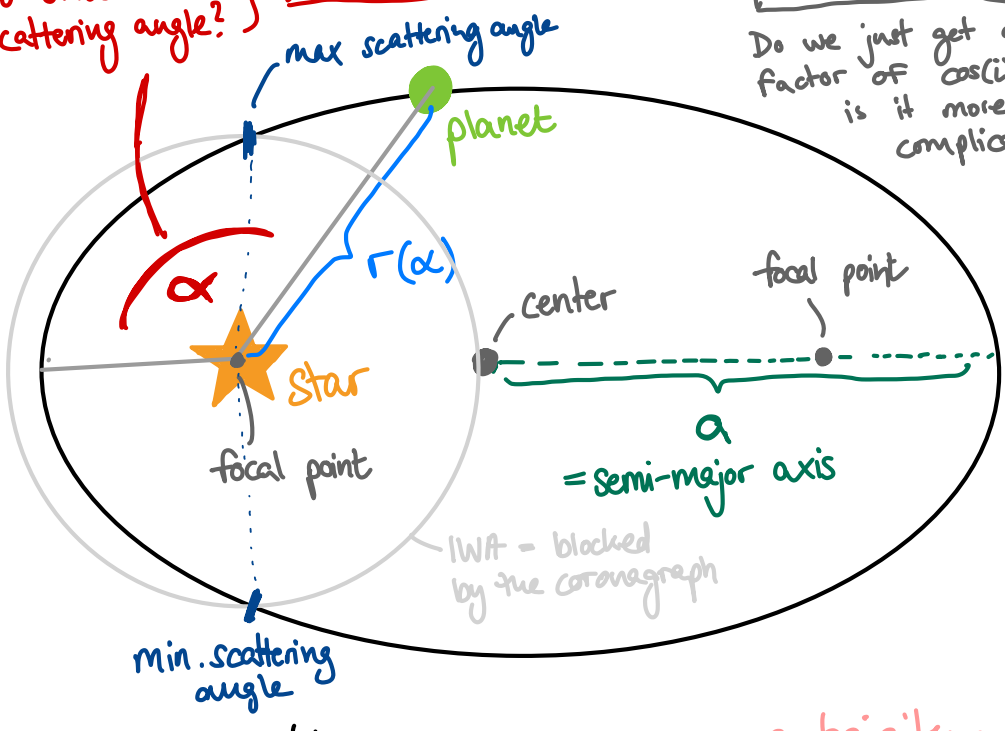
position angle
→ 90° offset to
scattering angle?

$$\varphi = \alpha + 90°$$

this plot assumes
inclination $i = 0$

Do we just get a factor of cos(i) or is it more complicated?



Ellipse equation:

eccentricity: $0 \leq e < 1$

$$r(\alpha) = \frac{a^2 - e^2}{a + e \cdot \cos(\alpha)}$$

We need: $r(\alpha) \geq n \cdot \lambda/D =: IWA$

Solve for α: $\alpha = \arccos\left(\frac{a^2 - e^2}{e \cdot IWA} - \frac{a}{e}\right)$