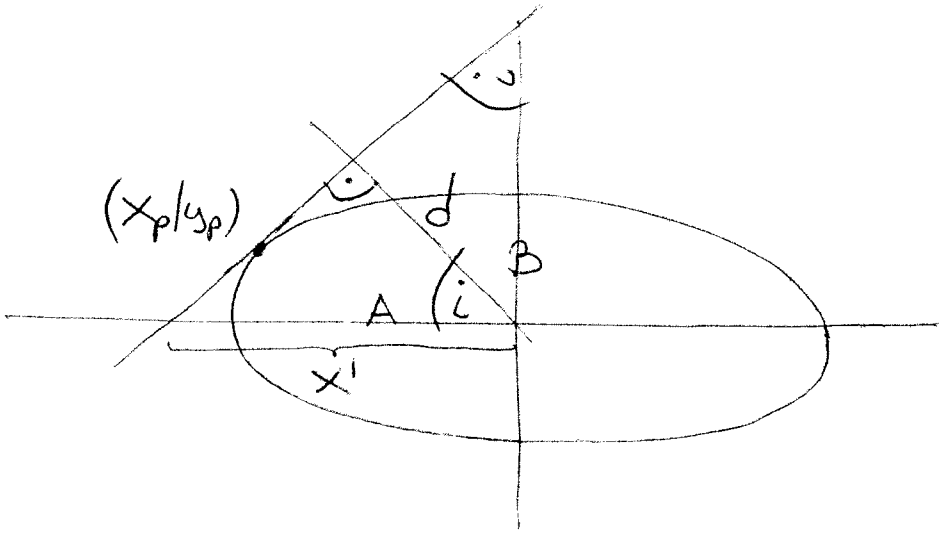

Tangentengleichung: $\frac{x x_p}{A^2} + \frac{y \cdot y_p}{B^2} = 1 \cap y = 0$

$$\Rightarrow \underline{x' = \frac{A^2}{x_p}}$$

$$\frac{d}{x'} = \cos i \Rightarrow \underline{d = \frac{A^2 \cos i}{x_p}}$$

Steigung der Tangente an der Stelle (x_p, y_p):

$$dx \cdot \frac{x_p}{A^2} + dy \cdot \frac{y_p}{B^2} = 0 \Rightarrow \underline{\frac{dy}{dx} = -\frac{B^2}{A^2} \cdot \frac{x_p}{y_p} = +\frac{\cos i}{\sin i}}$$

$\underline{\frac{x_p^2}{A^2} + \frac{y_p^2}{B^2} = m^2 = 1}$ Ellipsengleichung $\Rightarrow \underline{y_p = -\frac{B^2}{A^2}\frac{\sin i}{\cos i} x_p}$

$$x_p^2 \left[\frac{1}{A^2} + \frac{1}{B^2} \cdot \frac{B^4}{A^4} \frac{\sin^2 i}{\cos^2 i} \right] = 1 \Rightarrow \underline{x_p = \frac{A^2 \cos i}{\sqrt{A^2 \cos^2 i + B^2 \sin^2 i}}}$$

$$\Rightarrow \underline{d = \sqrt{A^2 \cos^2 i + B^2 \sin^2 i}}$$

$$\Rightarrow \underline{\varepsilon = 1 - \sqrt{\cos^2 i + \left(\frac{B}{A}\right)^2 \sin^2 i}}$$