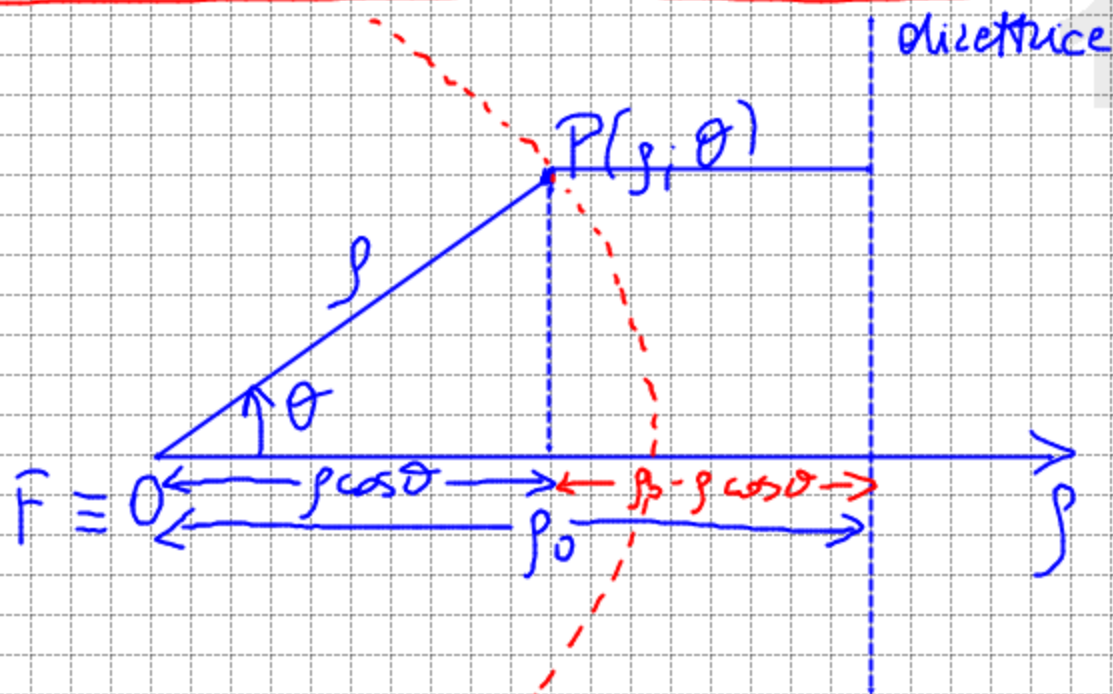


EQVAZIONE PARABOLA IN COORDINATE POLARI



F = fuoco della parabola
 $F \equiv O$

$P\bar{F}$ = distanza di P dalla direttrice.

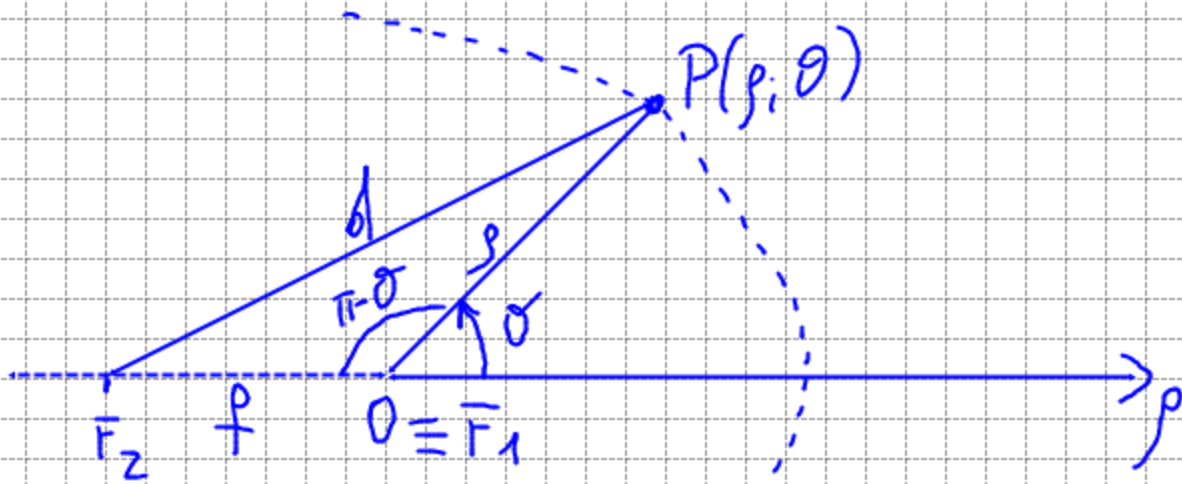
$$r = p_0 - r \cos \theta$$

$$r + r \cos \theta = p_0$$

$$r(1 + \cos \theta) = p_0$$

$$r = \frac{p_0}{1 + \cos \theta}$$

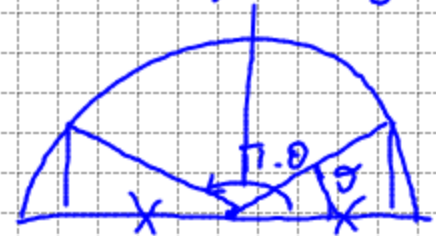
EQUAZIONE ELLISSE IN COORDINATE POLARI



$$F_1 F_2 = f$$

$$d + r = s \text{ (costante)}$$

$$d^2 = f^2 + r^2 - 2fr \cos(\pi - \theta)$$



$$d^2 = f^2 + r^2 + 2fr \cos \theta$$

$$d = s - r \quad d^2 = s^2 + r^2 - 2sr$$

$$s^2 + r^2 - 2sr = f^2 + r^2 + 2fr \cos \theta$$

$$2r(f \cos \theta + s) = s^2 - f^2 \quad r = \frac{(s^2 - f^2) / 2}{f \cos \theta + s}$$

$$r = \frac{(s^2 - f^2) / 2}{s + f \cos \theta}$$

$$r = \frac{(s^2 - f^2) / 2f}{\left(\frac{s}{f} + \cos \theta\right)}$$

$$r = \frac{(s^2 - f^2) / 2f}{\frac{s}{f} + \cos \theta}$$

EQUAZIONE
ELLISSE IN
COORDINATE POLARI