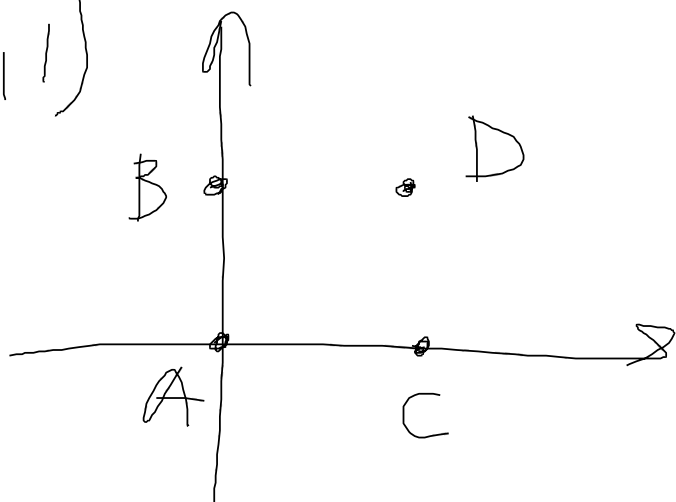


Fascio di coniche

per

$$A \equiv (0,0), B \equiv (0,1), C \equiv (1,0)$$

$$D \equiv (1,1)$$



$$\Gamma_1 = AB \cup CD$$

$$\Gamma_2 = AD \cup BC$$

$$AB: x=0 \quad CD: x=1$$

$$AD: y=x \quad BC: x+y=1$$

$$\Gamma_1: x(x-1) = 0$$

$$\Gamma_2: (y-x)(x+y-1) = 0$$

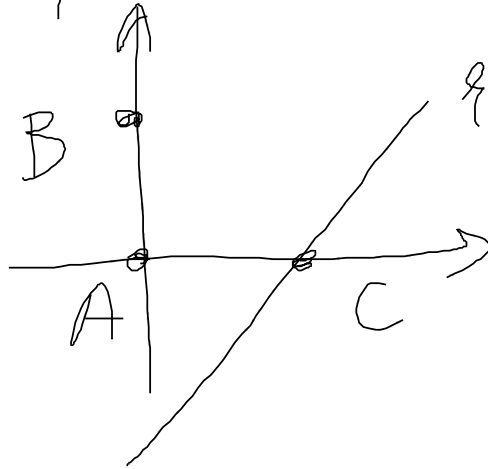
$$\Downarrow: \alpha x(x-1) + \beta (y-x)(x+y-1) = 0$$

Fascio di coniche
 per $A \equiv (0,0)$, $B \equiv (0,1)$
 e tangenti in $C \equiv (1,0)$

$$\Rightarrow r: y = x - 1$$

$$\Gamma_1 = AB \cup r$$

$$\Gamma_2 = AC \cup BC$$



$$AB: x = 0 \quad AC: y = 0$$

$$BC: x + y = 1$$

$$\Gamma_1: x(x - y - 1) = 0$$

$$\Gamma_2: y(x + y - 1) = 0$$

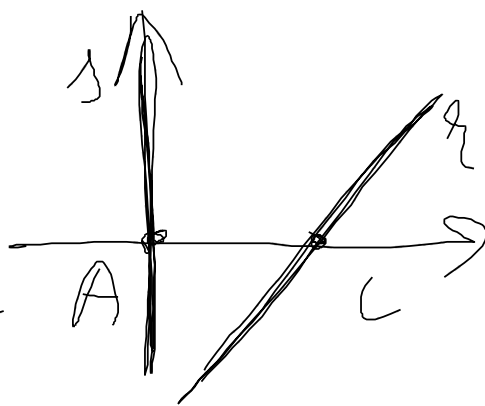
$$\Downarrow: \alpha x(x - y - 1) + \beta y(x + y - 1) = 0$$

Fascio di coniche
 tangenti in $A \equiv (0,0)$
 ad $s: x = 0$ e in $C \equiv (1,0)$
 ad $r: x + y - 1 = 0$

$$\Gamma_1 = x \cup y$$

$$\Gamma_2 = AC$$

c. 2 volte



$$\Gamma_1: x(x-y-1) = 0$$

$$\Gamma_2: y^2 = 0$$

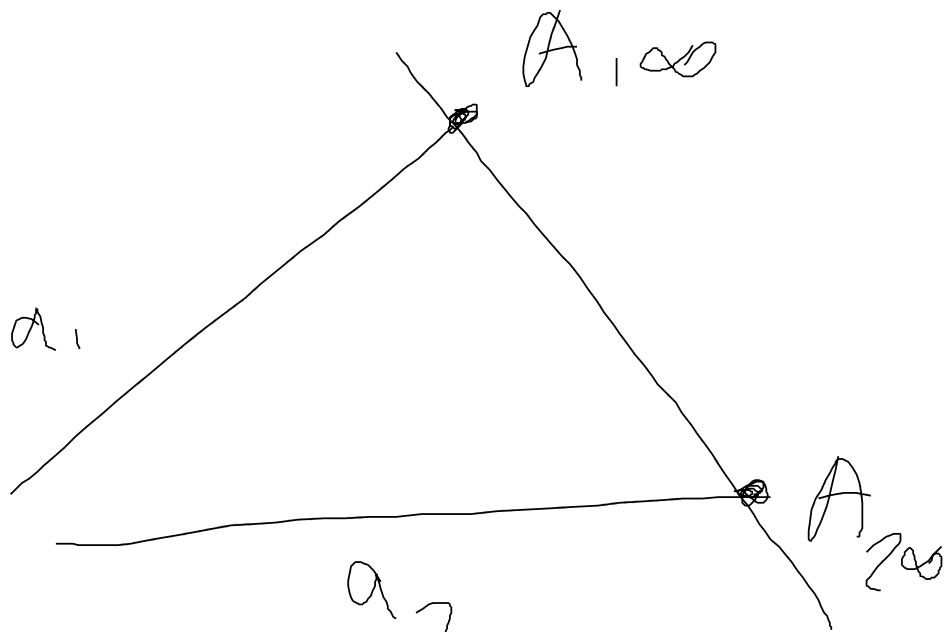
$$\downarrow: \alpha x(x-y-1) + \beta y^2 = 0$$

Trovare l'iperbole
dovente 2 sintoti

$$a_1: y-x=0 \quad a_2: y=0$$

e passante per $A \equiv (0, 2)$.

Trova il fascio di
iperboli con 2 sintoti
 a_1 e a_2



$$\Gamma_1 = a_1 \cup a_2$$

$$\Gamma_2 = \mathcal{A}_\infty \text{ cont. } 2 \text{ volte } \mathcal{A}_\infty$$

$$\Gamma_1: (x_2 - x_1)x_2 = 0$$

$$\Gamma_2: x_0^2 = 0$$

$$\mathcal{A}: \alpha(x_2 - x_1)x_2 + \beta x_0^2 = 0$$

$$\alpha(y - x)y + \beta = 0$$

Pass. per $A \equiv (0, 2)$

$$k = \frac{\beta}{\alpha}$$

$$(y - x)y + k = 0$$

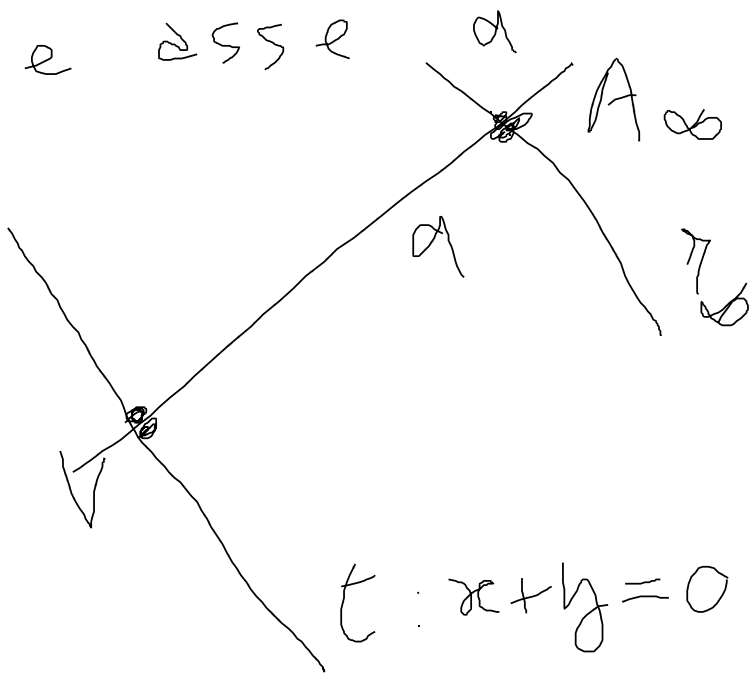
$$(2 - 0)2 + k = 0$$

$$k = -4$$

$$\boxed{y^2 - xy - 4 = 0}$$

Trovare la parabola
 avente vertice $V \equiv (a, a)$,
 asse $a: y = x$ e passante
 per $C \equiv (1, 0)$.

Trovo il fascio di
 parabole aventi vertice
 V e asse



$$\Pi_1 = t \vee g_\infty \quad (x_1 + x_2) x_0 = 0$$

$$\Pi_2 = a \quad \text{cont. 2 volte}$$

$$(x_1 - x_2)^2 = 0$$

$$\Gamma: \alpha (x_1 - x_2)^2 + \beta (x_1 + x_2) \lambda_0 = 0$$

$$\alpha (x-y)^2 + \beta (x+y) = 0$$

$$k = \frac{\beta}{\alpha}$$

$$(x-y)^2 + k(x+y) = 0$$

Passaggio per C:

$$(1-0)^2 + k(1+0) = 0$$

$$k = -1$$

$$\boxed{(x-y)^2 - (x+y) = 0}$$

Es. 17

$$r: y=0 \quad s: y=2x$$

$$\Gamma: 2xy - y^2 - 2x + 3y + 4 = 0$$

trovare il fascio di coniche passanti per l'intersez. di Γ con r ed s .

$$f: \alpha(2xy - y^2 - 2x + 3y + 4) + \beta y(y - 2x) = 0$$

Trovare il fascio di iperboli aventi
 una asintota $a_1: x=0$
 e la seconda asintota

il seconda asintota
 // ad $a_1: y=x$ e passanti

per $C \equiv (1, 0)$.

$$A_{\infty} \equiv (0, 0, 1)$$

$$R_{\infty}$$

a_1

C

$$\Gamma_1 = a_1 \cup CR_{\infty}$$

$$\Gamma_2 = CA_{\infty} \cup RA_{\infty}$$

$$CR_{\infty}: \frac{x-1}{1} = \frac{y-0}{1} \quad x-y-1=0$$

$$CA_{\infty}: x=1$$

~~$$\left. \begin{array}{l} x-1 = y \\ 0 = 1 \end{array} \right\} \begin{array}{l} x=1 \\ y=0 \end{array}$$~~

$$p_1: X_1(X_1 - X_2 - X_0) = 0$$

$$p_2: (X_1 - X_0)X_0 = 0$$

$$q: \alpha X_1(X_1 - X_2 - X_0) + \beta (X_1 - X_0)X_0 = 0$$

$$\alpha x(x-b-1) + \beta(x-1) = 0$$