

Quiver

permette di disegnare campi vettoriali 22/10/2020

$$F: \Omega \subseteq \mathbb{R}^2 \rightarrow \mathbb{R}^2$$

$$\Omega = [a, b] \times [c, d]$$

$$x \mapsto F(x)$$

$$[X, Y] = \text{meshgrid}(\cdot, \cdot) \rightarrow (F_x, F_y)$$

$$\text{quiver}(X, Y, F_x, F_y)$$

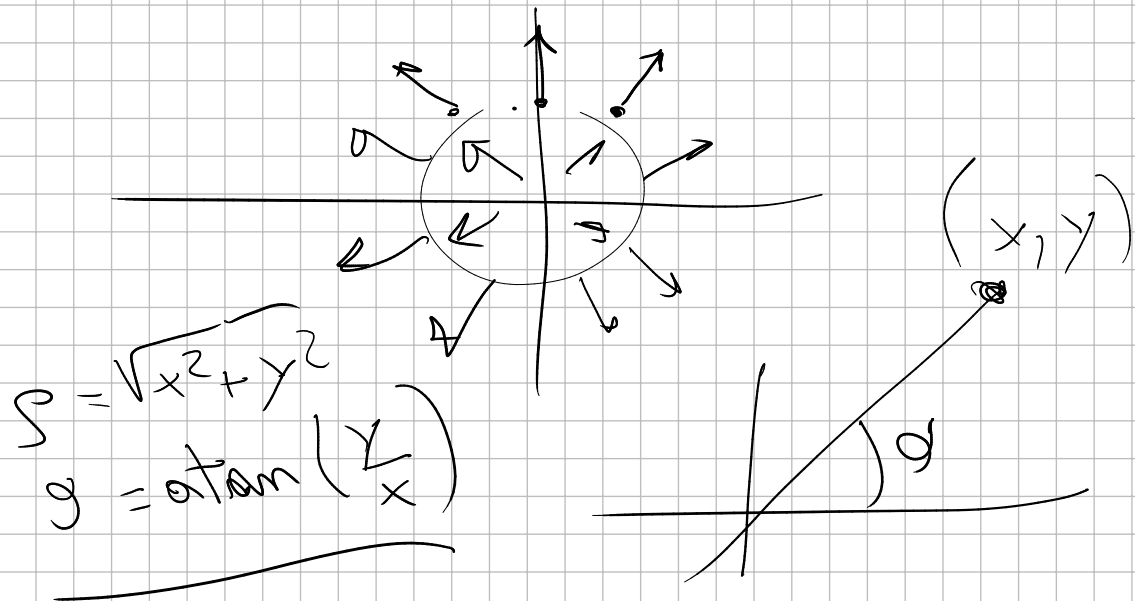
$$\text{quiver}(X, Y, F_x, F_y, \alpha)$$

$$\alpha > 0$$

Esempio

$$x = (x_1, x_2)$$

$$F(x) = \frac{x}{|x|}$$



$$x \rightarrow \frac{x^\perp}{|x|}$$

$$(x_1, x_2)^\perp \rightarrow (x_2, -x_1)$$

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$$\begin{cases} \dot{x}(t) = F(x(t)) \\ x(0) = x_0 \end{cases}$$

$$\begin{aligned} x &\in \mathbb{R}^2 \\ t &\rightarrow x(t) \in \mathbb{R}^2 \\ F: \mathbb{R}^2 &\rightarrow \mathbb{R}^2 \end{aligned}$$

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$$\frac{x(t+dt) - x(t)}{dt} = F(x(t))$$

$$x(t+dt) = x(t) + dt F(x(t))$$

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$$\text{quiver } \exists (X, Y, Z, F_x, F_y, F_z)$$



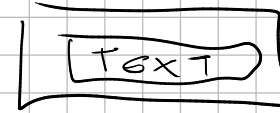
# Uicontrol

oggetti grafici che permettono all'utente di modificare parametri di uno script  
(INTERFACCIA UTENTE)

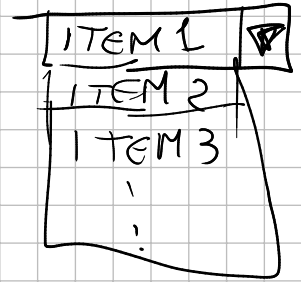
SLIDER



PUSHBUTTON



POPUPMENU



EDIT



TOGGLE BUTTON

