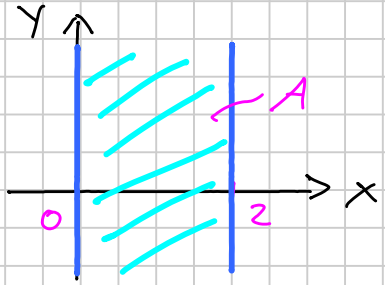
$$\begin{cases} f(x,y) = x + \operatorname{arctg}(x+y) \\ \text{IN } A = \{(x,y) \in \mathbb{R}^2 : x^2 - 2x \le 0 \end{cases}$$



RICERCA DI INF/SUP

$$\begin{cases} x \in [0,2] \rightsquigarrow x_{MIN} = 0 \quad x_{MAX} = 2 \\ -\frac{\pi}{2} < \operatorname{arctg}(x+y) < \frac{\pi}{2} \end{cases}$$

$$\begin{cases} \sup f = \lim_{\substack{y \to +\infty \\ x = x_{MAX}}} f(x,y) = 2 + \frac{\pi}{2} \\ \inf f = \lim_{\substack{y \to -\infty \\ x = x_{MIN}}} f(x,y) = 0 - \frac{\pi}{2} = -\frac{\pi}{2} \end{cases}$$

$\rightsquigarrow$ MAX E MIN NON ESISTONO