

# REPETITION 10/01

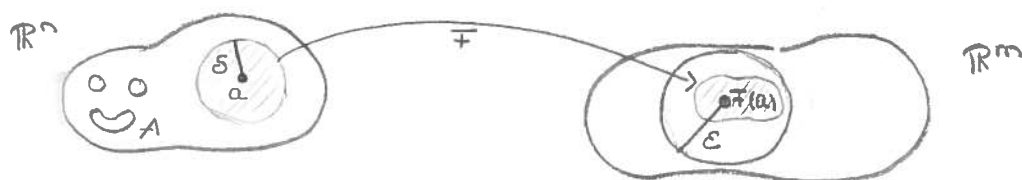
## Continuity

$$F: A \subseteq \mathbb{R}^n \longrightarrow \mathbb{R}^m$$

is cont in  $a \in A \iff$

$$\forall \varepsilon > 0 \quad \exists \delta > 0 : \quad \|F(x) - F(a)\| < \varepsilon \quad \text{if} \quad \|x - a\| < \delta, \quad x \in A$$

$\uparrow$  for all                       $\uparrow$  there exists



## Properties

If  $F, G$  are cont.

- $\Rightarrow$
- $F + G$  is cont
  - $F \cdot G$  is cont
  - $F \circ G$  is cont