

Teoria dei Sistemi e Controllo Ottimo e Adattativo (C. I.)  
Teoria dei Sistemi (Mod. A)

Docente: Giacomo Baggio

Lez. 17: Introduzione al problema del controllo

Corso di Laurea Magistrale in Ingegneria Meccatronica  
A.A. 2021-2022

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

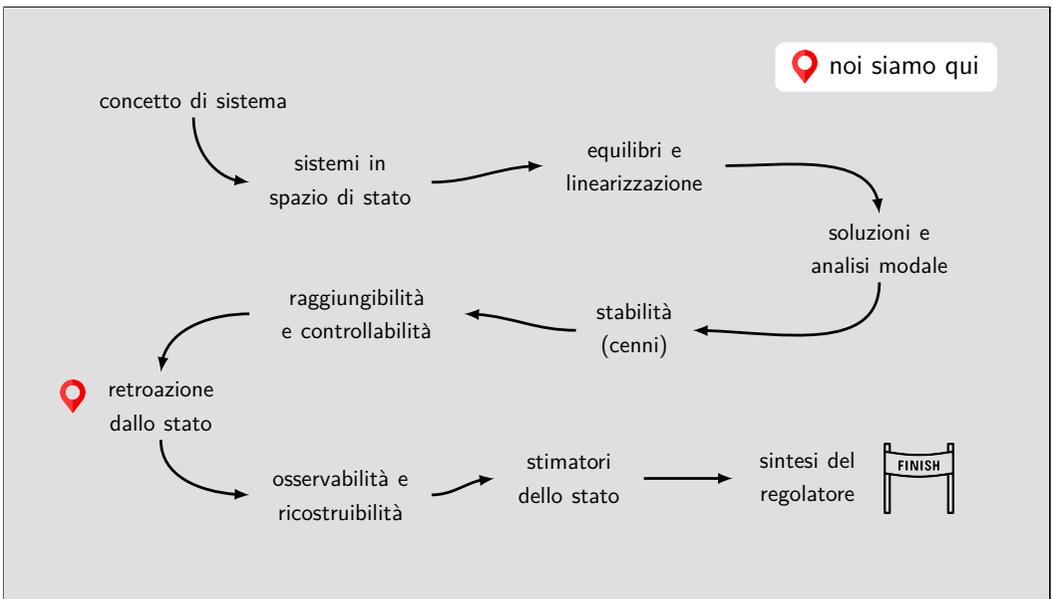
---

---

---

---

---

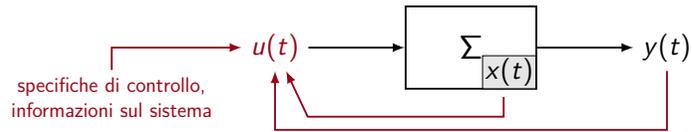






## Controllo in retroazione o closed-loop o feedback

sistema con stato  $x(t)$ , ingresso  $u(t)$  e uscita  $y(t)$



legge di controllo  $u(t)$  dipende dai valori di  $x(t)$  e/o  $y(t)$

*approccio più complesso (richiede sensori di misura),  
ma robusto a incertezze e/o disturbi esterni!*

---

---

---

---

---

---

---

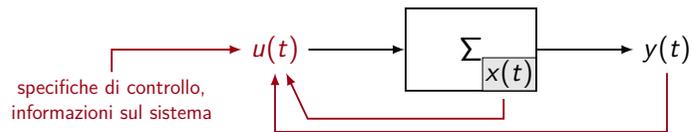
---

---

---

## Controllo in retroazione o closed-loop o feedback

sistema con stato  $x(t)$ , ingresso  $u(t)$  e uscita  $y(t)$



1. Retroazione statica
- dallo stato:  $u(t) = f(x(t))$  (allo stesso istante  $t!$ )
  - dall'uscita:  $u(t) = f(y(t))$  (allo stesso istante  $t!$ )

---

---

---

---

---

---

---

---

---

---





