

Stability

- If the amplitude of an input signal is bounded then the amplitude of the output signal has to be bounded too.

$$\Rightarrow \int_{-\infty}^{\infty} |g(t)| dt < \infty$$

Causation

$$u(t) = 0 \quad \text{for } t < 0$$

- The cause eventuates always first afterwards the impact could be noticed

Inputs and step response

