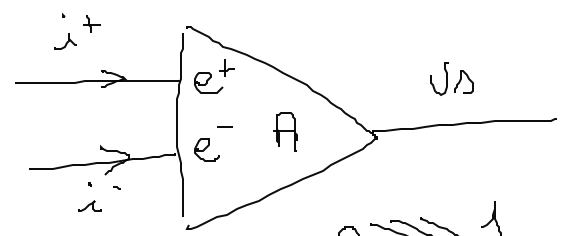


Ampli Op.



$$V_s = A (e^+ - e^-) \quad [1]$$

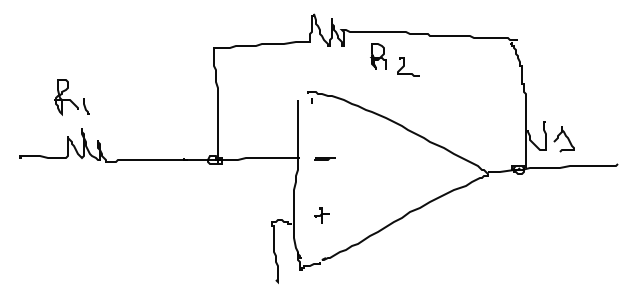
$$A > 0$$

$$A \gg \gg 1$$

$$e^+ - e^- \approx 0$$

$$i^+ \approx i^- \approx 0$$

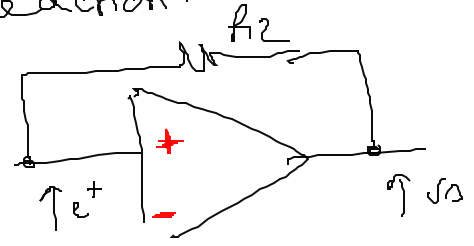
Centre reaction = réaction de V_s sur e^-



si $V_s \uparrow$ $e^- \uparrow \rightarrow V_s \downarrow$

- Amplification
- Circuit stable (étudier la stabilité si C, R)

Reaction



si $e^+ \uparrow$ $V_s \uparrow$ $e^- \uparrow$ $V_s \uparrow$
 $\Rightarrow V_s = +V_{cc}$

fonctionnement non linéaire
 $V_s = \pm V_{smax} \approx \pm V_{cc}$
 (alimentation)

fonctionnement instable
 pas d'amplification

si $(e^+ - e^-) > 0 \rightarrow V_s > 0 \quad V_s = +V_{cc}$
 si $(e^+ - e^-) < 0 \rightarrow V_s < 0 \quad V_s = -V_{cc}$