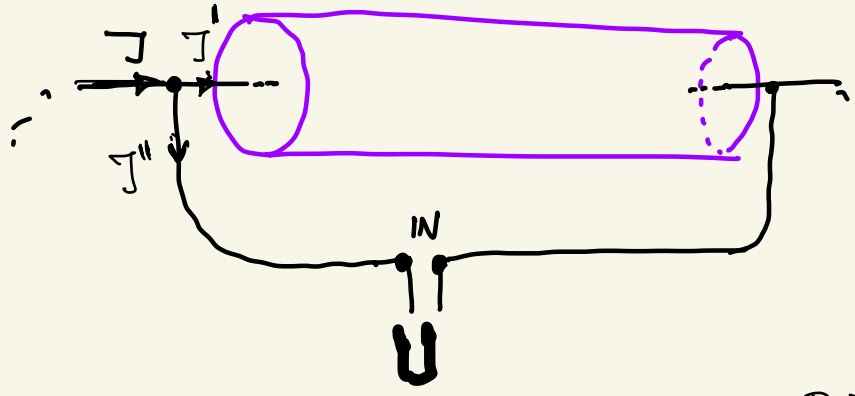
26 MAI

Montaj care nu este bun

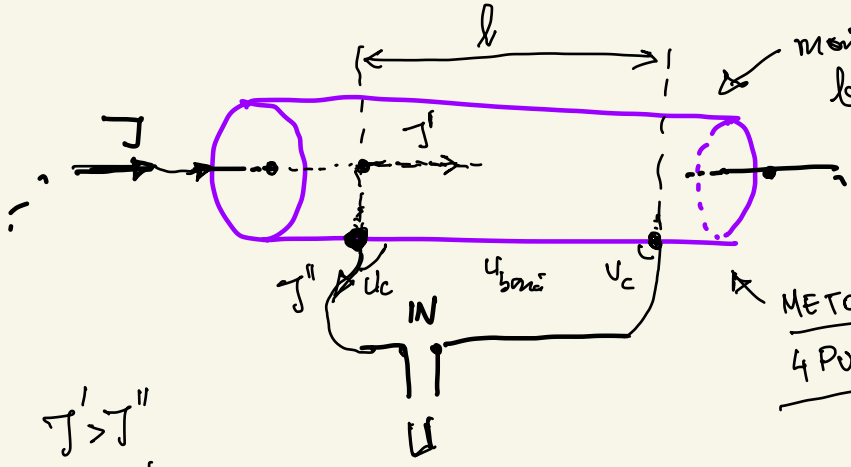


$$U = U_c + U_{bară} + U_c = 2U_c + U_{bară} = 2R \cdot I' + R_{bară} I'$$

$$\simeq 2R_c I + R_{bară} I$$

$$2R_c I \gg R_{bară} I \Rightarrow$$

$\Rightarrow$ măsurăm $2R_c$ și nu $R_{bară}$



METODA CELOR 4 PUNCTE

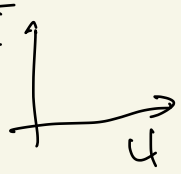
$I' > I''$

$I \simeq I'$

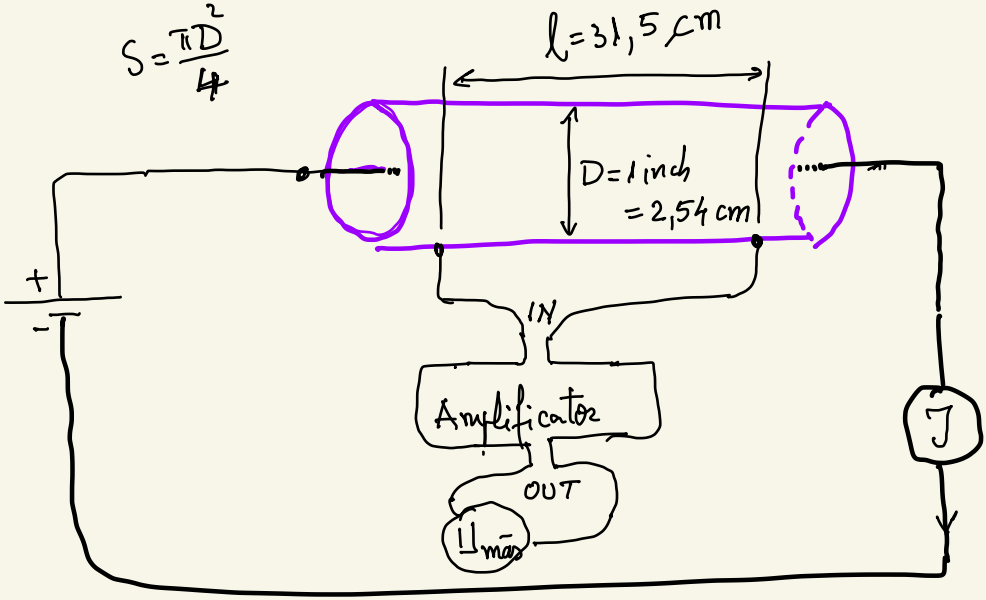
$$U = U_c + U_{bară} + U_c$$

$$U = 2U_c + U_{bară}$$

$$U = \underbrace{2R_c I''}_{\text{fmică}} + \underbrace{R_b \cdot I'}_{\text{elefant}} \simeq R_b I$$



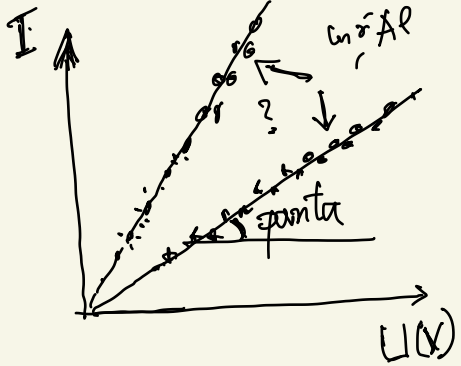
$$S = \frac{\pi D^2}{4}$$



$$U_{măs} = 10^5 \cdot U$$

$$U = \frac{U_{măs}}{100.000}$$

I (A)	$U_{măs}$ (V)	$U = \frac{U_{măs}}{100.000}$ (V)



$$panta = \frac{1}{R} \Rightarrow$$

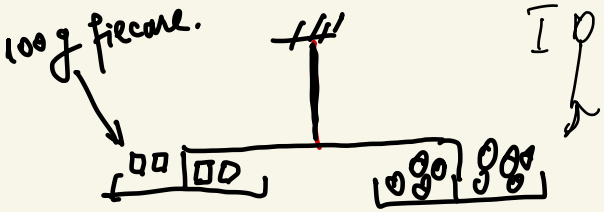
$$\Rightarrow R = \frac{1}{panta}$$

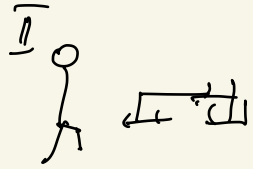
Pe același grafic oricând!

Obs. Ex: $R = \frac{3}{7} \cdot 10^{-5} = 0,428571 \cdot 10^{-5}$

$4,28 \cdot 10^{-6}$

NUUU... NU... NU AȘA!





(I) $m = 4,2\,kg$

(II) $m = 4,20\,kg$

pentru $J = 1A$.

Metalul	$R(\Omega)$	$\rho(\Omega m)$	$\sigma\ (\Omega^{-1}m^{-1})$	$n(m^{-3})$	$v_d(\frac{m}{s})$
Cu	–				
Al	–				

fără multe zecimale (☹)

$$R = \frac{\rho l}{S} \Rightarrow \rho = \frac{RS}{l}$$

$$\sigma = \frac{1}{\rho} \leftarrow \text{conductivitate electrică } (\Omega^{-1}m^{-1})$$