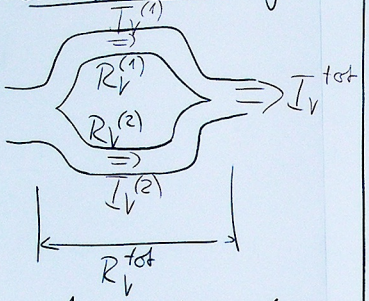
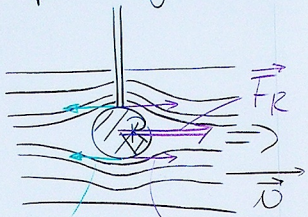
Parallelschaltung



$$\Rightarrow \frac{1}{R_V^{tot}} = \frac{1}{R_V^{(1)}} + \frac{1}{R_V^{(2)}}$$

Das Stokesche Reibungsgesetz

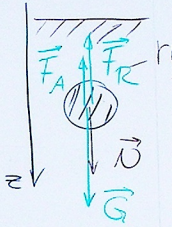
Bsp: Kugel in Strömung



$\vec{F}_{KF} = -\vec{F}_{FK}$ (3.N.P.)

$$\boxed{F_R = \underbrace{6\pi}_{\text{Kugel}} R \eta v}$$

Anwendung: Sedimentation



2.N.P: $ma = mg - m_{FK} \cdot g - 6\pi R \cdot \eta \cdot v$

Exp: $v = konst \Rightarrow a = 0$

$$v_s = \frac{mg - m_{FK} g}{6\pi R \eta}$$