

$$0 \rightarrow \Omega^0(\mathbb{R}^1) \xrightarrow{d} \Omega^1(\mathbb{R}^1) \rightarrow 0$$

$$f \longmapsto df$$

$$H^1_{dR}(\mathbb{R}) = \Omega^1(\mathbb{R}) / d\Omega^0(\mathbb{R}) \cong 0, \quad \text{так как} \quad \text{для} \quad f dx \in \Omega^1(\mathbb{R})$$

$$\exists \text{ кривая } F(p) = \int_0^p f dx \in \Omega^0(\mathbb{R}), \quad dF = f dx \Rightarrow$$

$\Rightarrow$  все функции точны.

$$H^0_{dR}(\mathbb{R}) = \text{Ker}(\Omega^0 \rightarrow \Omega^1) / 0 = \mathbb{R}, \quad \text{т.к.} \quad df = 0 \Leftrightarrow f \equiv \text{const.}$$