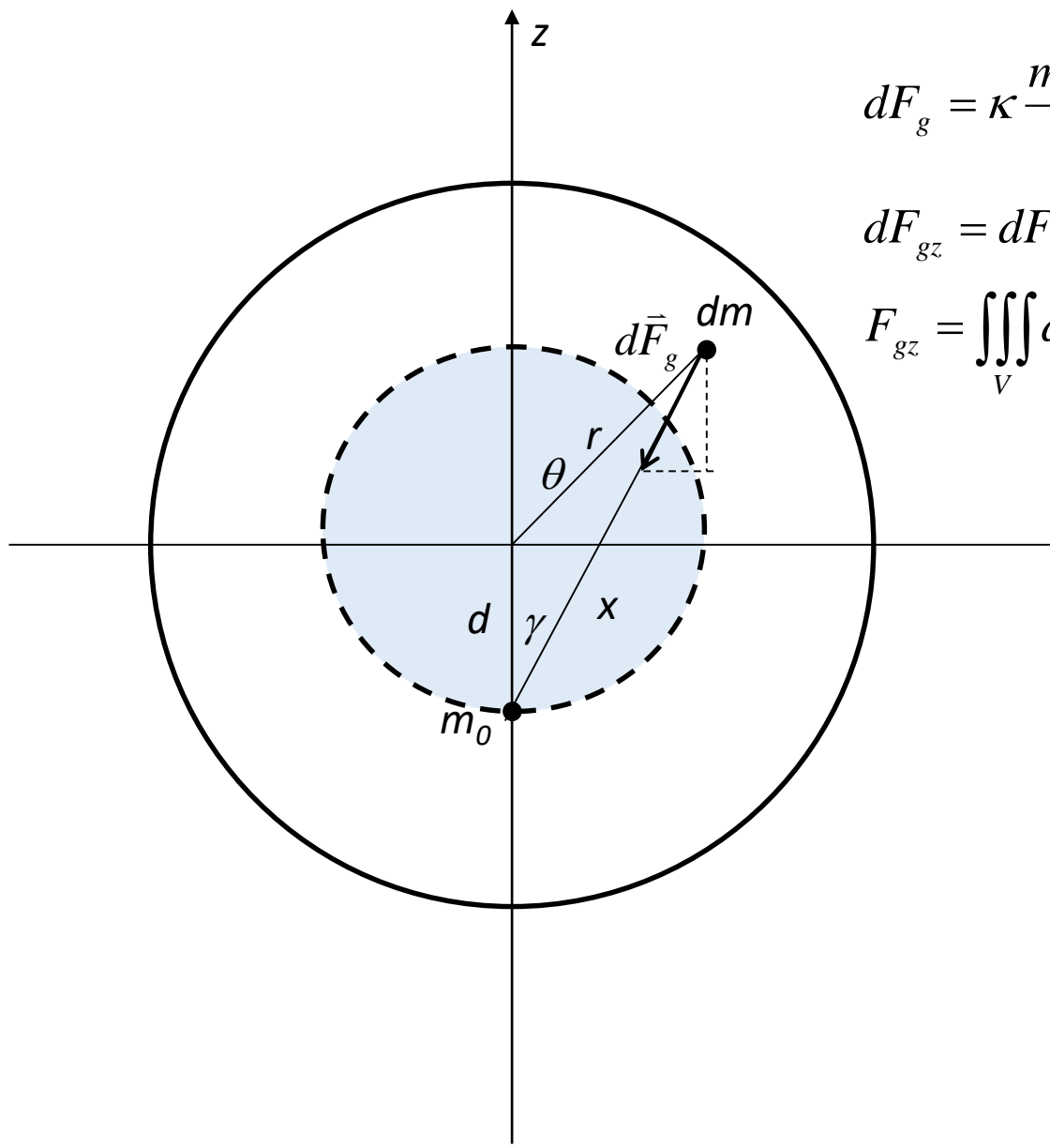


Gravitacijski privlak znotraj krogle



$$dF_g = \kappa \frac{m_0 dm}{x^2} = \kappa \frac{m_0 \rho r^2 dr \sin \vartheta d\vartheta d\varphi}{x^2}$$

$$dF_{gz} = dF_g \cos \gamma = \kappa \frac{m_0 \rho r^2 dr \sin \vartheta d\vartheta d\varphi}{x^2} \cos \gamma$$

$$F_{gz} = \iiint_V dF_{gz}$$

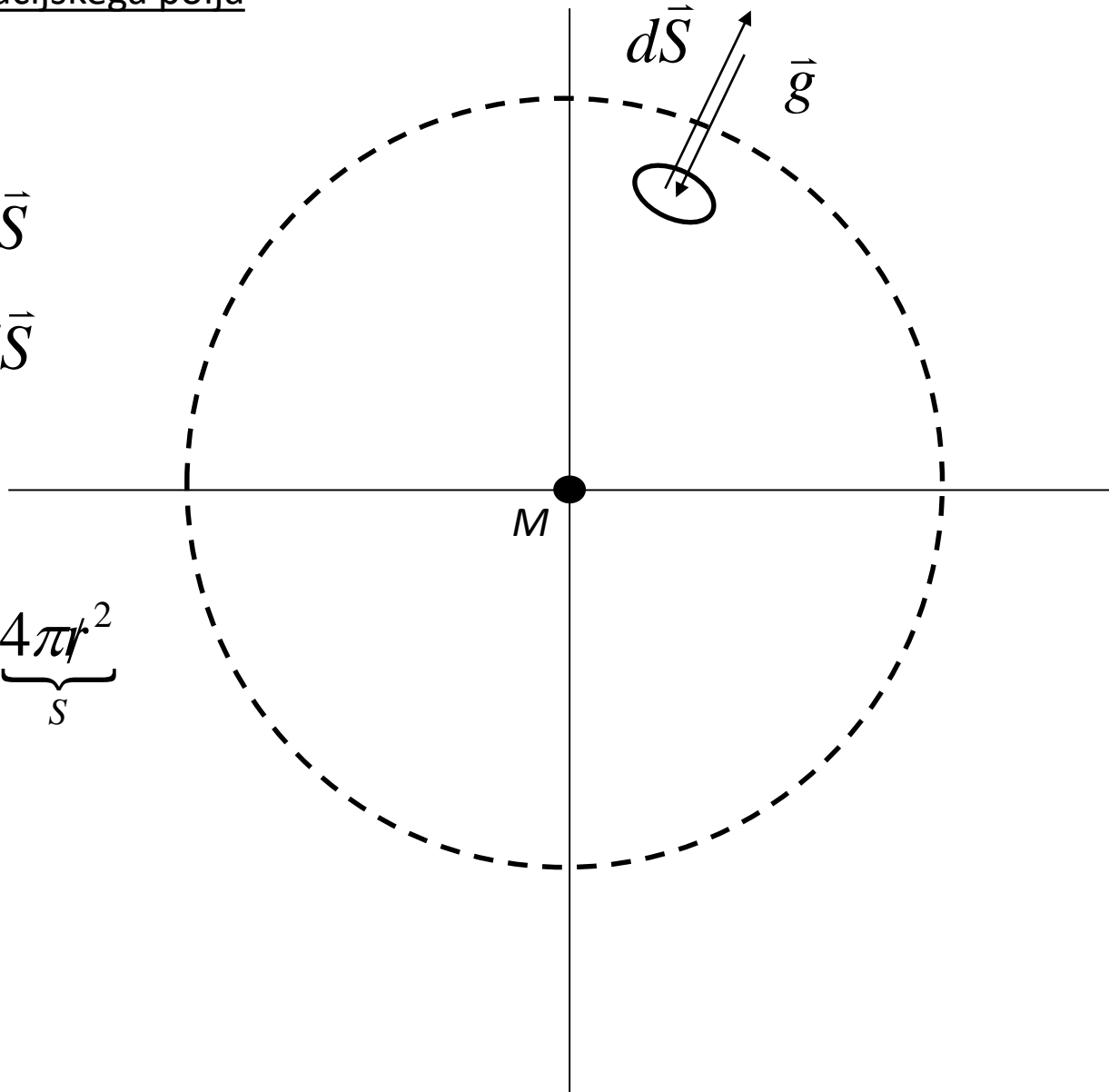
$$F_{gz} = \kappa \frac{m_0 m(r < d)}{d^2}$$

Pretok gravitacijskega polja

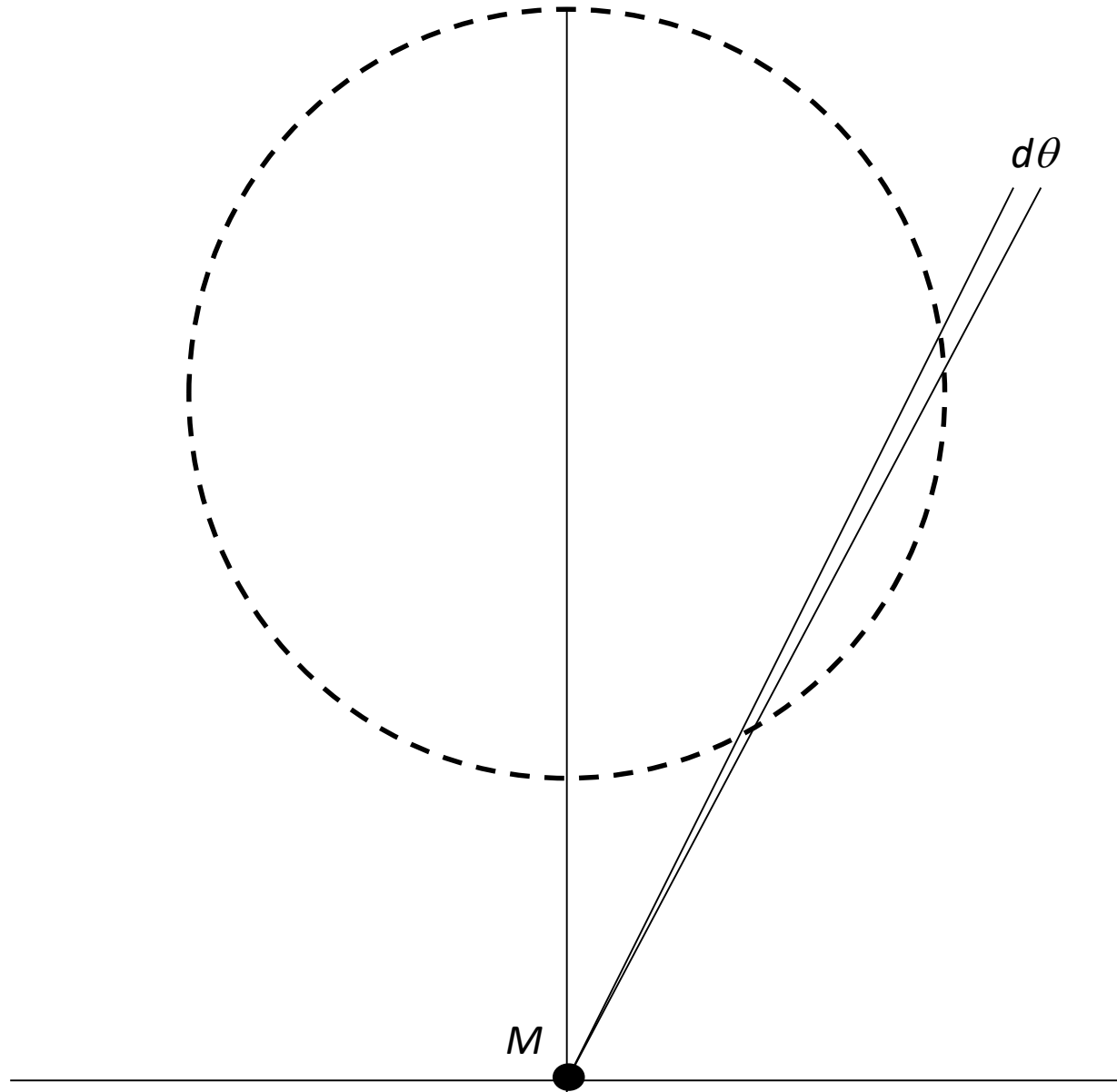
$$d\Phi_g = \vec{g} d\vec{S}$$

$$\Phi_g = \int_S \vec{g} d\vec{S}$$

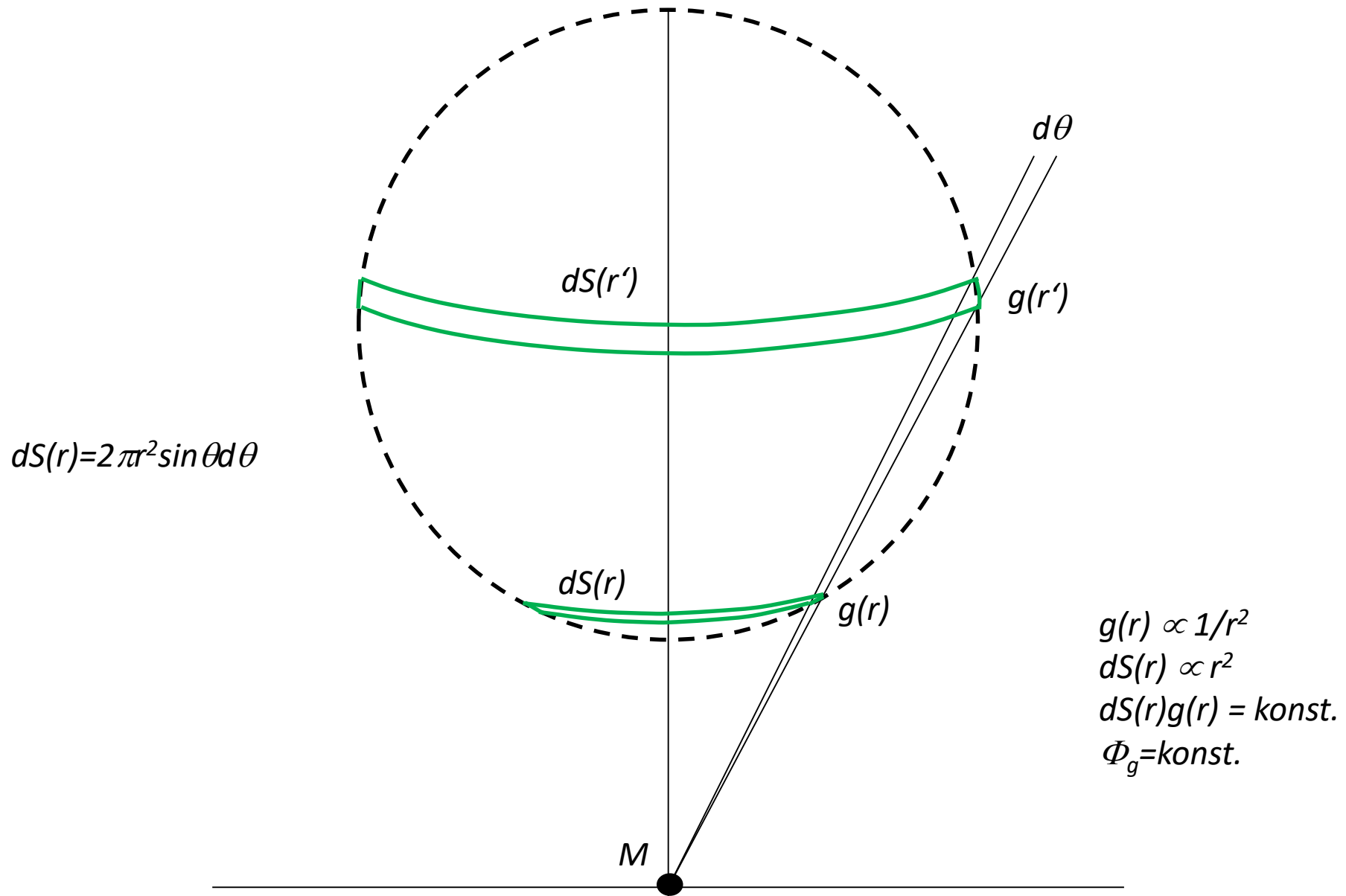
$$\Phi_g = \underbrace{\frac{\kappa M}{r^2}}_g \underbrace{4\pi r^2}_S$$



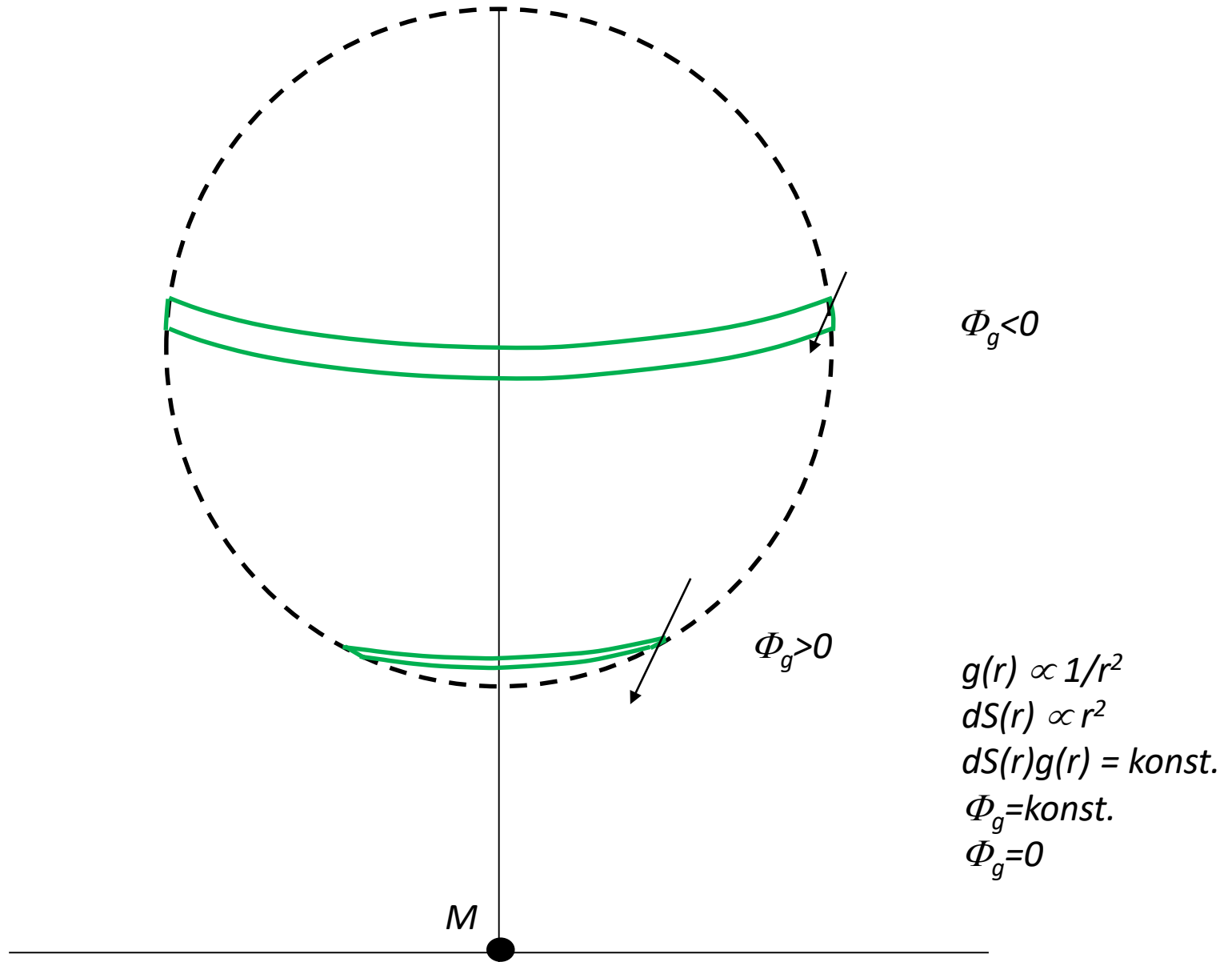
Pretok gravitacijskega polja



Pretok gravitacijskega polja



Pretok gravitacijskega polja



Gaussov zakon za gravitaciju

$$\oiint_{\partial V} \vec{g} d\vec{S} = -4\pi\kappa \iiint_V \rho dV$$