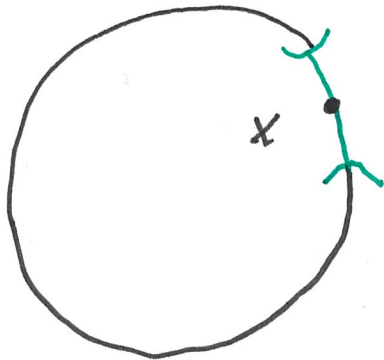


Zu Definition 1.1

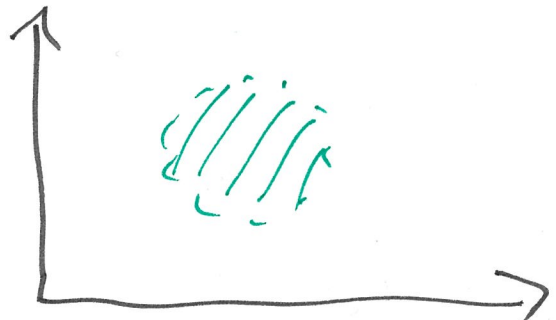
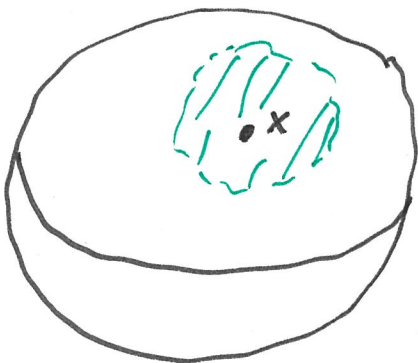
\mathcal{S}_1



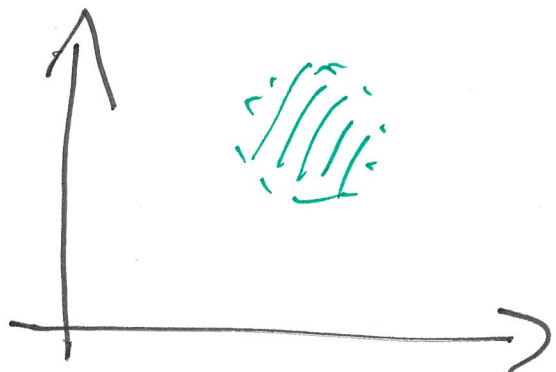
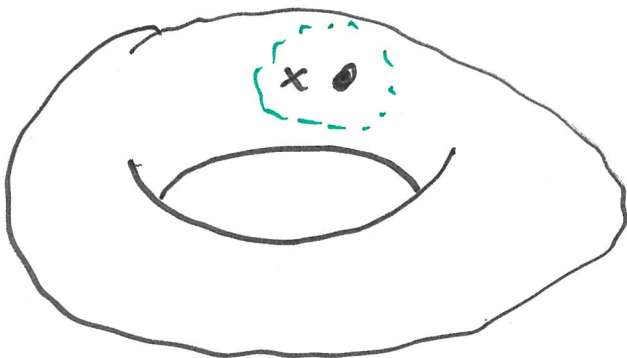
Sieht lokal
aus wie:

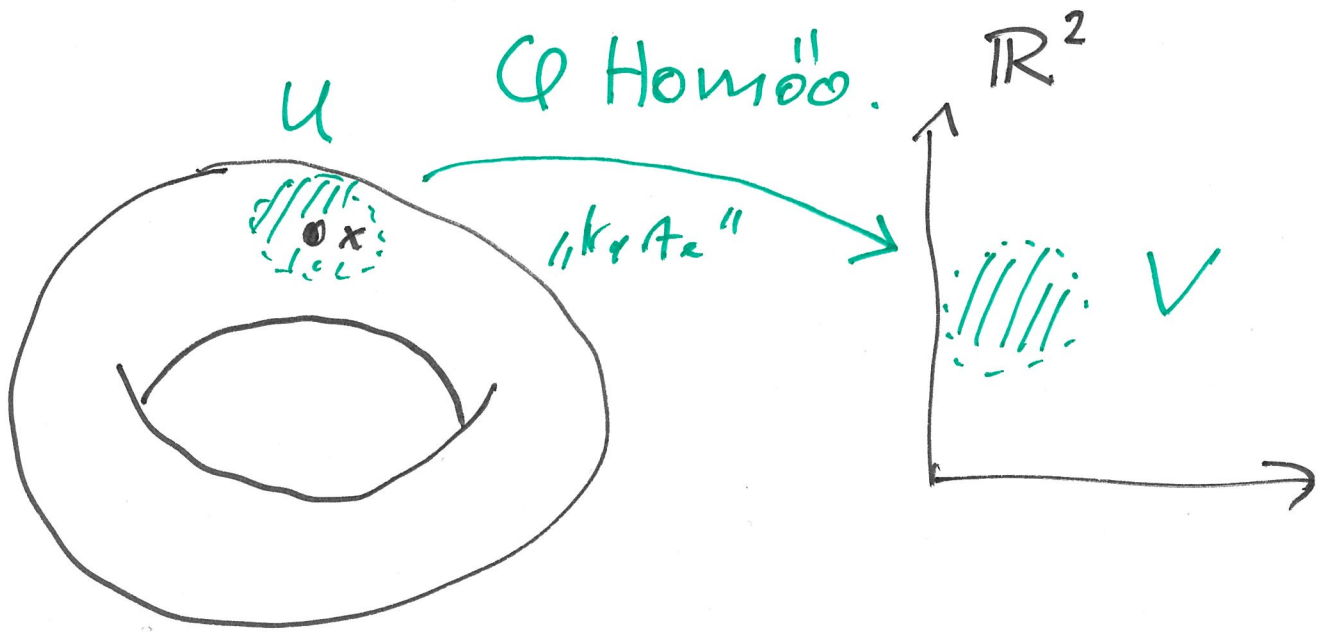


$$\mathcal{S}_2 = \{(x_1, x_2, x_3) \in \mathbb{R}^3 : x_1^2 + x_2^2 + x_3^2 = 1\}$$

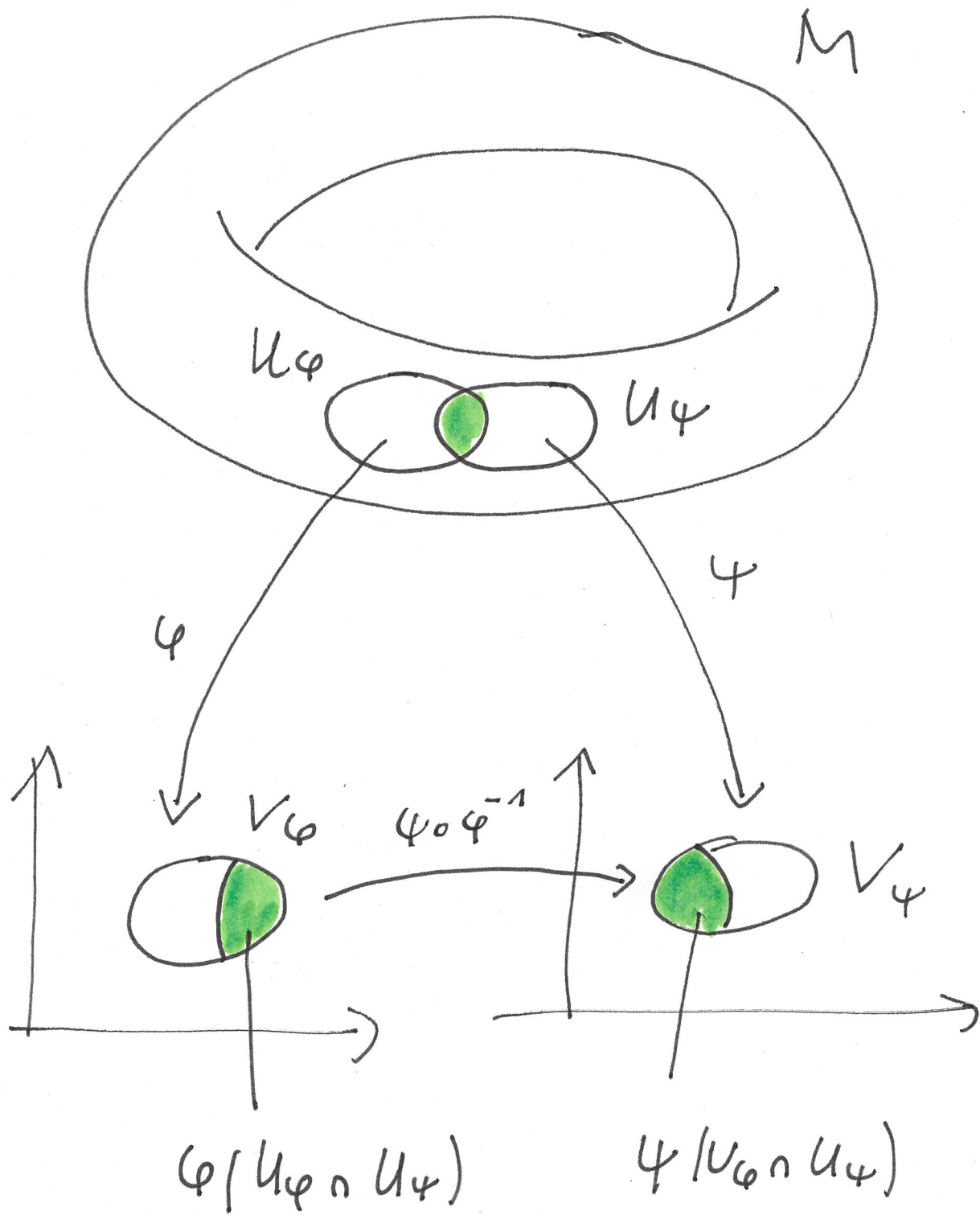


Torus

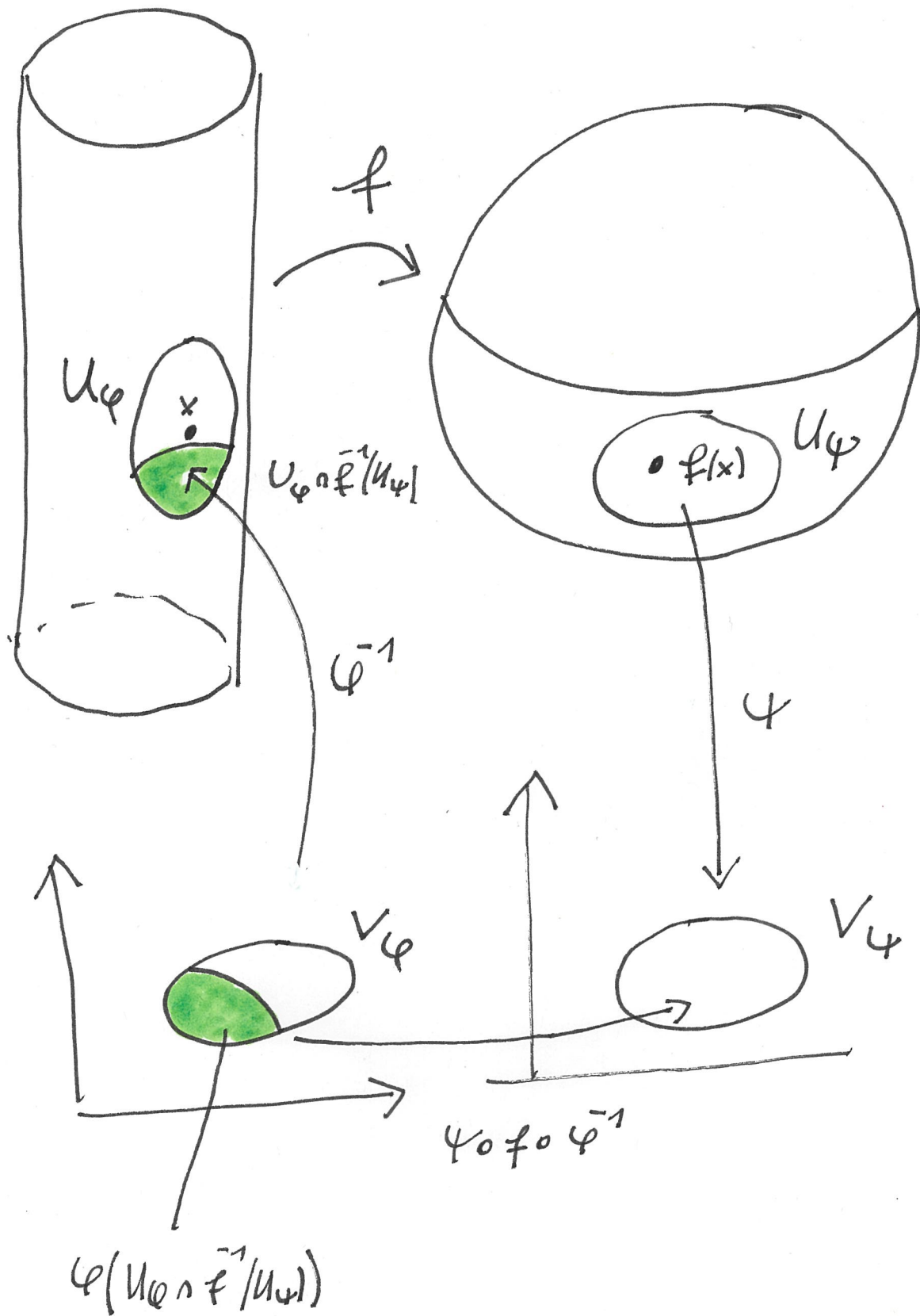




Zu Definition 2.1

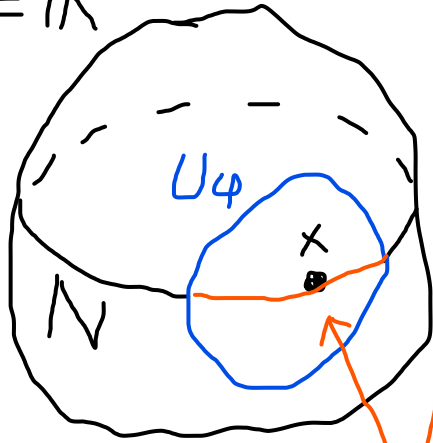


Zu Definition 2.11

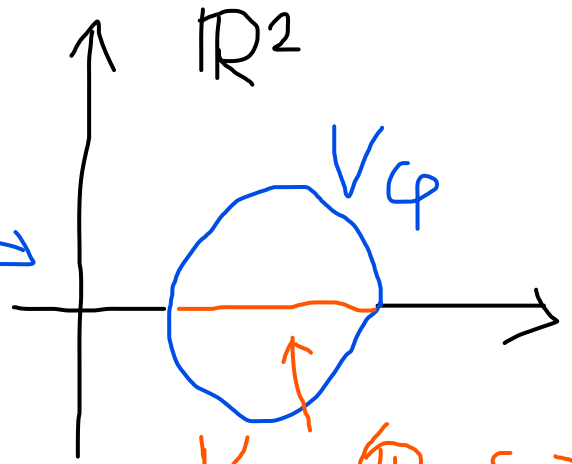
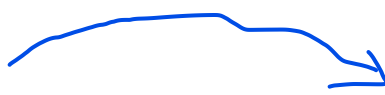


Zu Definition 2.28

$$\mathbb{S}_2 \subseteq \mathbb{R}^3$$



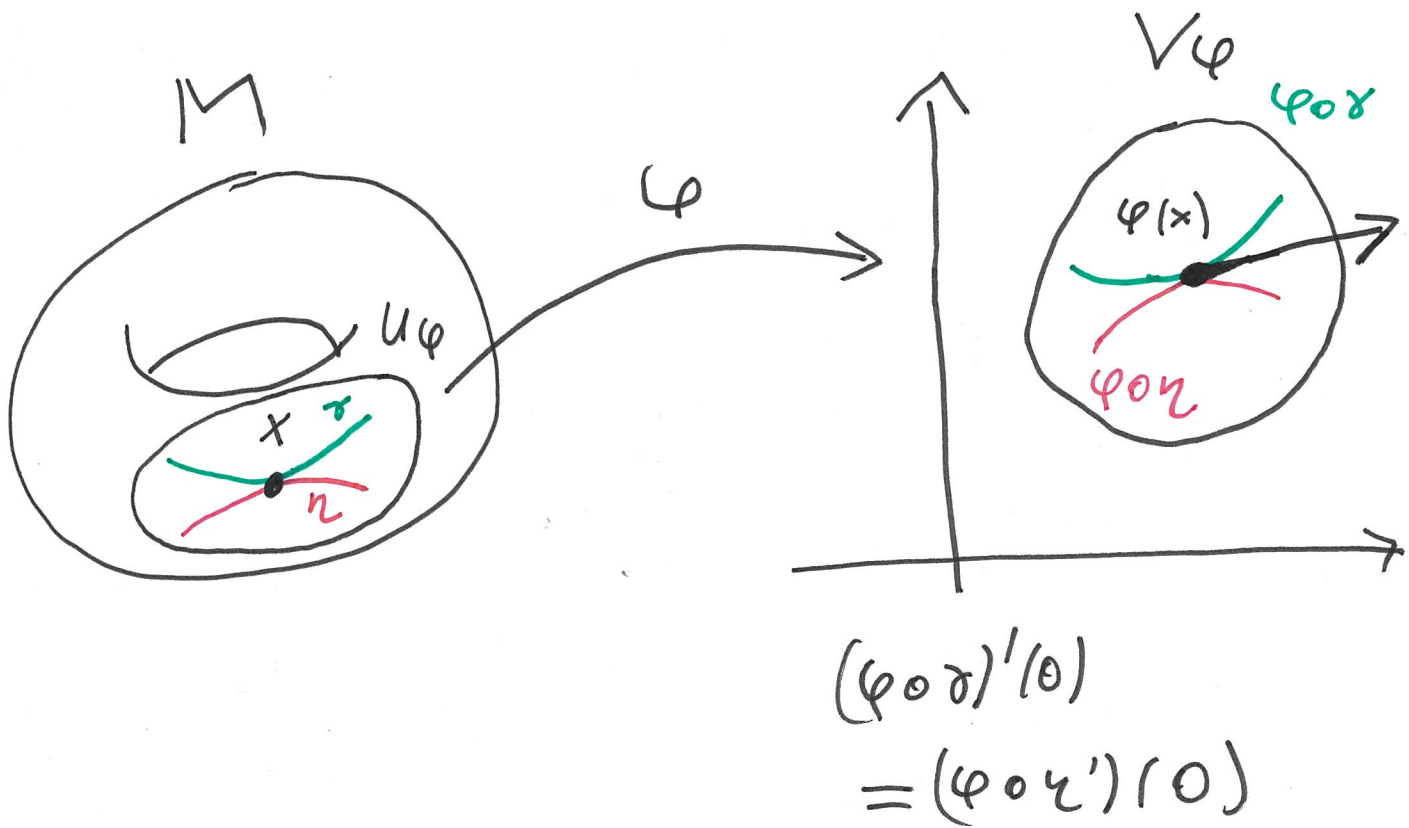
$$U_\varphi \cap N$$

$$\varphi$$


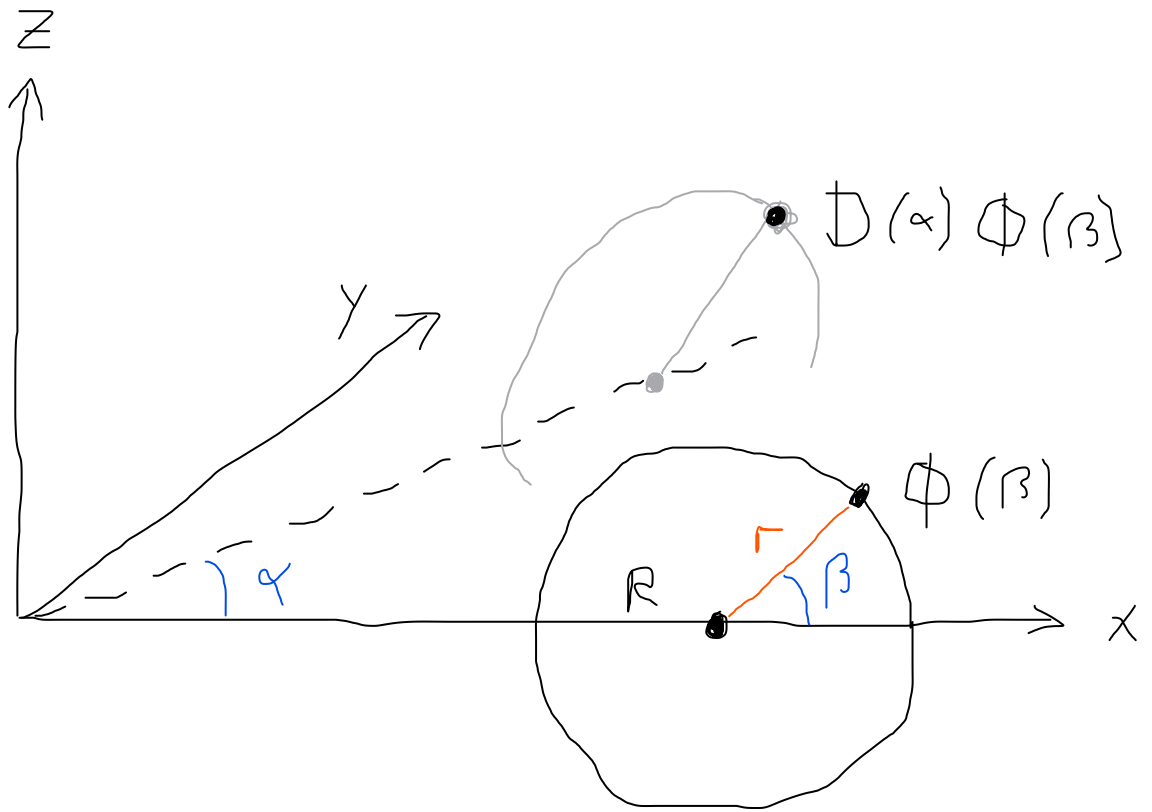
$$V_\varphi \cap (\mathbb{R} \times \{0\})$$

Äquator N

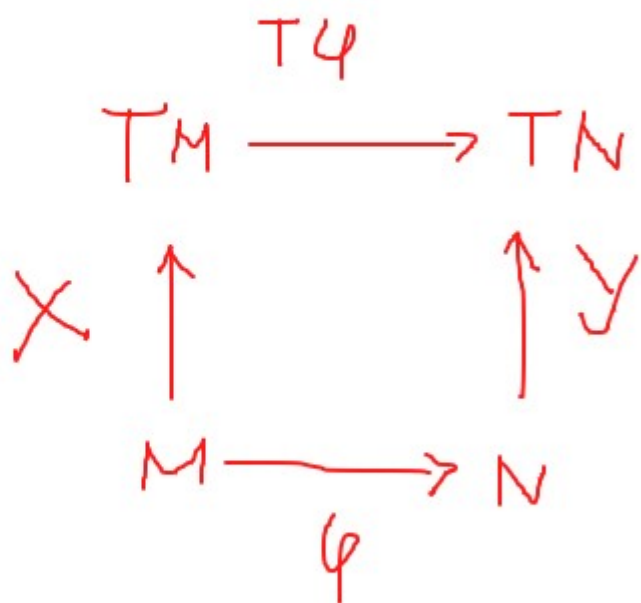
Zu Definition 3.1



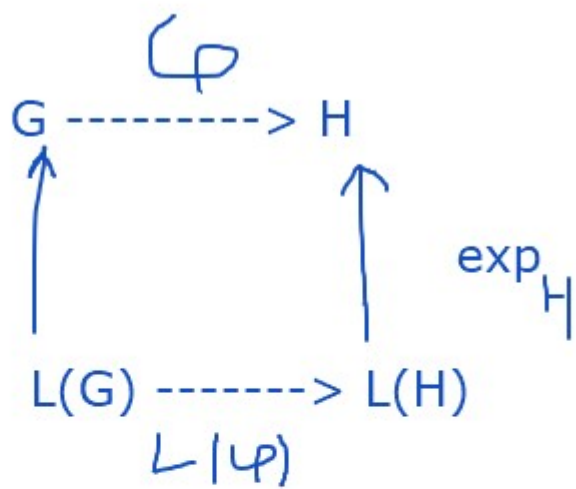
Zum Torus in Kapitel 8



Zu Definition 13.27



Zu Satz 18.5



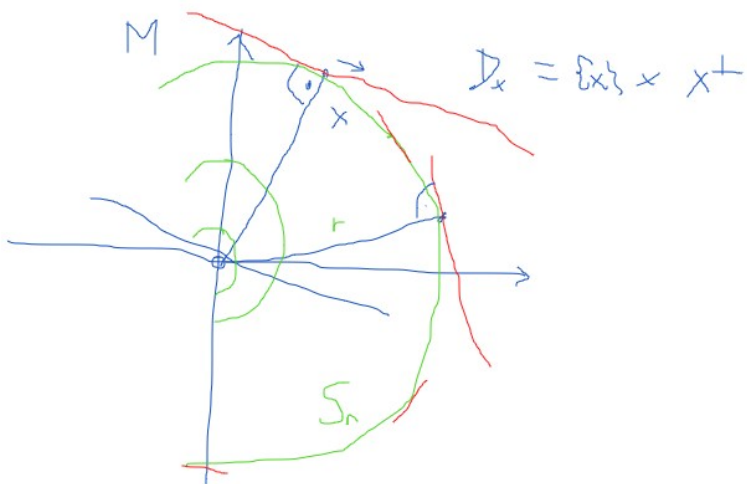
Zu Definition 21.10

und Beispiel 21.11

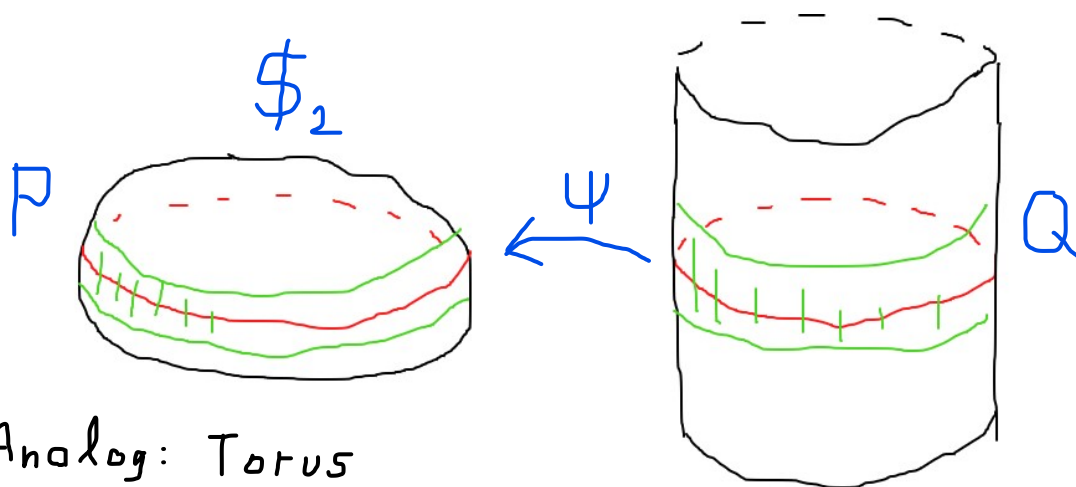
$$\begin{array}{ccc} E_1 & \xrightarrow{\varphi} & E_2 \\ \pi_1 \downarrow & \curvearrowright & \downarrow \\ M_1 & \xrightarrow{\tilde{f}} & M_2 \end{array} \quad \begin{array}{ccc} TM_1 & \xrightarrow{T\varphi} & TM_2 \\ \pi_{TM_1} \downarrow & \curvearrowright & \downarrow \pi_{TM_2} \\ M_1 & \xrightarrow{f} & M_2 \end{array}$$

C^k

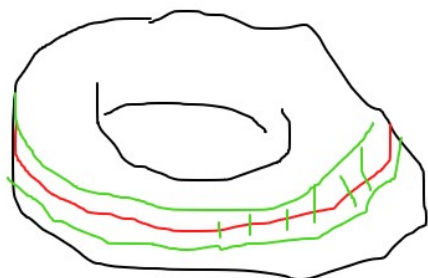
Zu Beispiel 22.4



Z_4 Beispiel 23.2



Analog: Torus



Zu Definition B.2

$$D_x = \{x\} \times x^\perp \text{ auf } \mathbb{R}^2 \setminus \{0\} = M$$

