

$$T \text{ and } f : \mathcal{S}_n(T) \rightarrow k$$

iteration of pi-
geonhole principle

$$S \text{ and } f : \mathcal{S}_n(S) \rightarrow k \text{ stable}$$

yields

$$S \text{ and } f_{\text{lim}} : \mathcal{S}_{n-1}(S) \rightarrow k$$

application
of MTT^{n-1}

S' homogeneous for f