

Definition 11.38. [11H] We also define the rules

$$\|A\|_{F-\tilde{p}} = \begin{cases} \sqrt[\tilde{p}]{\sum_{i,j} |A_{i,j}|^{\tilde{p}}} & \tilde{p} < \infty \\ \max_{i,j} |A_{i,j}| & \tilde{p} = \infty \end{cases} ,$$

for $\tilde{p} \in [1, \infty]$. The case $\tilde{p} = 2$ is called Frobenious' norm.