Beispiel 3.8: Vektornormen

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$$\|x\|_2 := \left(\sum_{i=1}^n x_i^2\right)^{1/2} \dots$$
 Euklidische Vektornorm

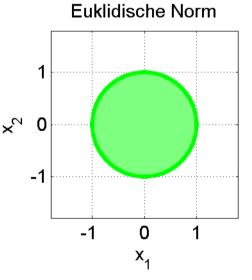
$$||x||_1 := \sum_{i=1}^n |x_i|$$
 ... 1-Norm

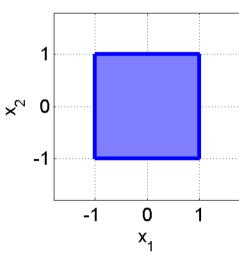
1 - Norm

$$\|x\|_{\infty} := \max_{i=1,\dots,n} |x_i|$$
 ... Maximumnorm, ∞ -Norm

Kugeln

 $\{x: ||x|| \leq 1\}$





Maximumnorm



Martin-Luther-Universität Halle-Wittenberg, NWF III - Institut für Mathematik Martin Arnold: Numerische Mathematik (BSc Wirtschaftsmathematik, SoS 2010)