

nobblfile

Today we take a quick look at the definition of a Lie group. A Lie group is a group that is simultaneously a differentiable manifold and such that the group operations are smooth. An example of a Lie group is $\mathrm{GL}_n \mathbb{R}$, that is the set of all $n \times n$ real matrices, together with the Euclidean topology ($\mathrm{GL}_n \mathbb{R} \sim \mathbb{R}^{n^2}$)

Theorem 0.1. *This is a beautiful theorem.*

$$n = 2$$

And voilà.

Proof. This is a not a proof. □

Hey

$$n = 2 \tag{1}$$

Theorem 0.2. *Hey*

Lemma 0.3. *Hey*

hòsikjdvbksljvb

Proposition 0.4. *Hey hey*

$$n = 2056 \tag{2}$$

- (i) First item
- (ii) second item
- (iii) third item
- (iv)
 - (a) sublist first item
 - (b) another one