1 System SLSE

Definition 1.1. *Structures* in SLSE (Symmetric Logic of Sequenced Exponentials) contain countably many *atoms*, denoted a,b,c,d,.. [1]

Theorem 1.2. *Socrates is mortal.*

Proof. Socrates is a man. All men are mortal. Therefore Socrates is mortal. □

2 Permutability of Rules

Trust me bro

3 Cut elimination for ???

$$
\mathsf{s}\cfrac{\mathsf{p\uparrow}\cfrac{\mathsf{w\downarrow}\cfrac{S'(?(U,U'),!(V,V'))}{S'(?(U,[U,?R]),!(V,V'))}}{S'\{?(U,[U',?R],V,V')\}}}{S'\{?(U,[(U',V),?R],V'\}}
$$

References

[1] Lutz Straßburger. Mell in the calculus of structures. *Theoretical Computer Science*, 309(1-3):213–285, 2003.