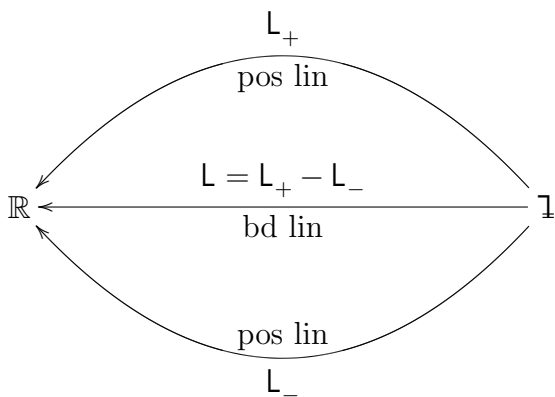


$$\mathbb{1} \in \overset{\omega}{\underset{0}{\mathbb{R}}} \text{ unit BanLat}$$

$$\mathbb{R} \overset{\triangleright}{\underset{0}{\mathbb{1}}} \in \mathbb{R} \overset{1}{\underset{0}{\mathbb{1}}} \text{ BanLat}^1$$

$$\mathbb{R} \overset{\triangleright}{\underset{0}{\mathbb{1}}} = \mathbb{R} \overset{\triangleright}{\mathbb{1}} - \mathbb{R} \overset{\triangleright}{\mathbb{1}}$$



$$\mathbb{1} \geq 0 \Rightarrow \mathbb{L}_+ \mathbb{1} = \bigcap_{0 \leq \mathbb{1}' \leq \mathbb{1}} \mathbb{L} \mathbb{1}' \geq 0 \vee \mathbb{L} \mathbb{1}$$

$$c \geq 0 \Rightarrow \mathbb{L}_+ \mathbb{1} c = \underbrace{\mathbb{L}_+ \mathbb{1}}_c c$$

$$\begin{cases} \dot{\mathbb{1}} \geq 0 \\ 0 \leq \mathbb{1} \leq \mathbb{1} \end{cases} \Rightarrow \mathbb{L}_+ \underbrace{\mathbb{1} + \mathbb{1}} \geq \mathbb{L} \underbrace{\mathbb{1} + \mathbb{1}} = \mathbb{L} \mathbb{1} + \mathbb{L} \mathbb{1} \xRightarrow{\sup} \mathbb{L}_+ \underbrace{\mathbb{1} + \mathbb{1}} \geq \mathbb{L}_+ \mathbb{1} + \mathbb{L}_+ \mathbb{1}$$

$$0 \leq \mathbb{1} \leq \mathbb{1} + \mathbb{1} \Rightarrow \begin{cases} 0 \leq \mathbb{1} \wedge \mathbb{1} \leq \mathbb{1} \\ 0 \leq \mathbb{1} - \mathbb{1} \wedge \mathbb{1} \leq \mathbb{1} \end{cases} \Rightarrow \mathbb{L} \mathbb{1} = \mathbb{L} \underbrace{\mathbb{1} \wedge \mathbb{1}} + \mathbb{L} \underbrace{\mathbb{1} - \mathbb{1} \wedge \mathbb{1}} \leq \mathbb{L}_+ \mathbb{1} + \mathbb{L}_+ \mathbb{1}$$

$$\xRightarrow{\sup} \mathbb{L}_+ \underbrace{\mathbb{1} + \mathbb{1}} = \mathbb{L}_+ \mathbb{1} + \mathbb{L}_+ \mathbb{1}$$

$$\mathbb{1} \in \mathbb{1} \Rightarrow \mathbb{L}_+ \mathbb{1} = \mathbb{L}_+ \underbrace{\mathbb{1} + \overline{\mathbb{1}} e}_{\mathbb{1}} - \mathbb{L}_+ \underbrace{\overline{\mathbb{1}} e}_{\mathbb{1}} \Rightarrow \mathbb{L}_+ \underbrace{\mathbb{1} + \mathbb{1} + \overline{\mathbb{1} + \mathbb{1}} e}_{\mathbb{1}} + \mathbb{L}_+ \underbrace{\overline{\mathbb{1}} e}_{\mathbb{1}} + \mathbb{L}_+ \underbrace{\overline{\mathbb{1}} e}_{\mathbb{1}}$$

$$\stackrel{\text{all terms pos}}{=} \mathbb{L}_+ \underbrace{\mathbb{1} + \overline{\mathbb{1}} e}_{\mathbb{1}} + \mathbb{L}_+ \underbrace{\mathbb{1} + \overline{\mathbb{1}} e}_{\mathbb{1}} + \mathbb{L}_+ \underbrace{\overline{\mathbb{1} + \mathbb{1}} e}_{\mathbb{1}} \Rightarrow \mathbb{L}_+ \underbrace{\mathbb{1} + \mathbb{1}} = \mathbb{L}_+ \mathbb{1} + \mathbb{L}_+ \mathbb{1}$$

$$c \geq 0 \Rightarrow \mathbb{L}_+ \mathbb{1} c = \underbrace{\mathbb{L}_+ \mathbb{1}}_c c$$

$$\mathbb{L}_+ \mathbb{1} + \mathbb{L}_+ \underbrace{-\mathbb{1}} = \mathbb{L}_+ \underbrace{\mathbb{1} - \mathbb{1}} = \mathbb{L}_+ 0 = 0 \Rightarrow \mathbb{L}_+ (-\mathbb{1}) = -\mathbb{L}_+ \mathbb{1} \Rightarrow \mathbb{L}_+ \text{ lin} \Rightarrow \mathbb{L}_- = \mathbb{L}_+ - \mathbb{L} \text{ lin}$$

$$\bigwedge_{\mathbb{1} \geq 0} 0 \leq \mathbb{L}_+ \mathbb{1} \geq \mathbb{L} \mathbb{1} \Rightarrow \mathbb{L}_{\pm} \text{ pos}$$

$$\overline{\mathbb{L}} = \mathbb{L}_+e + \mathbb{L}_-e$$

$$\overline{\mathbb{L}} \leq \overline{\mathbb{L}_+} + \overline{\mathbb{L}_-} = \mathbb{L}_+e + \mathbb{L}_-e$$

$$\bigwedge_{0 \leq 1 \leq e} -e \leq 21 - e \leq e \Rightarrow \overline{21 - e} \leq 1 \Rightarrow \overline{\mathbb{L}} \geq \underbrace{\mathbb{L}21 - e}_{= 2\mathbb{L}1 - \mathbb{L}e} \overset{\sup}{\Rightarrow} \overline{\mathbb{L}} \geq 2\mathbb{L}_+e - \mathbb{L}e = \mathbb{L}_+e + \mathbb{L}_-e$$