$$\text{grade alg } \mathbb{T} = \mathbb{T}_{|} \sqcup \mathbb{T}_{-}$$

$$\mathbb{T}_i \times \mathbb{T}_j \subset \mathbb{T}_{i+j}$$

$$\mathbb{K}\triangle^{0} \ni \mathbb{T} = \mathbb{T}_{+} \sqcup \mathbb{T}_{-} \ni \mathbb{L} = \mathbb{L}_{+} + \mathbb{L}_{-} \text{ graded algebra}$$

$$\mathbb{T}_i \, \mathbb{T}_j \subset \mathbb{T}_{i+j}$$

graded tensor product

$$\mathbb{T} \boxtimes \mathbb{T} \ni \mathbb{L}_i \boxtimes \mathbb{L}_j$$

$$\underbrace{\mathbb{L} \boxtimes \overset{j}{\mathbb{L}}}\,\underbrace{\overset{k}{\mathbb{t}} \boxtimes \mathbb{t}} = \overset{jk}{(-1)}\,\underbrace{\mathbb{L}\mathbb{t}} \boxtimes \underbrace{\mathbb{L}\mathbb{t}}$$

Grassmann envelope

$$\Lambda_{+}\triangle^{0} \ni {}_{\Lambda}\mathbb{T} = \Lambda_{+} \boxtimes \mathbb{T}_{+} \sqcup \Lambda_{-} \boxtimes \mathbb{T}_{-} \ni \xi \boxtimes \mathbb{L}_{+} + \eta \boxtimes \mathbb{L}_{-} \text{ super algebra}$$

$$\lambda \overbrace{\xi \boxtimes \mathbb{L}_{+} + \eta \boxtimes \mathbb{L}_{-}} = \overbrace{\lambda\xi} \boxtimes \mathbb{L}_{+} + \overbrace{\lambda\eta} \boxtimes \mathbb{L}_{-}$$

$$\overbrace{\alpha \boxtimes \mathbb{L}}^{i} \times \overbrace{\beta \boxtimes \mathbb{t}}^{j} = \overset{ij}{(-1)}\,\overbrace{\alpha\beta} \boxtimes \overbrace{\mathbb{L} \times \mathbb{t}}$$

$$\mathbb{T} \text{ assoc} \implies {}_{\Lambda}\mathbb{T} \text{ assoc}$$

$$\overset{ij}{(-1)}\,\overset{jk}{(-1)}\,\overset{ki}{(-1)}\,\underbrace{\alpha \boxtimes \mathbb{L}} \times \underbrace{\overbrace{\beta \boxtimes \mathbb{t}}^{j} \times \overbrace{\gamma \boxtimes \mathbb{t}}^{k}} = \overset{ij}{(-1)}\,\overset{ki}{(-1)}\,\underbrace{\alpha \boxtimes \mathbb{L}}_{i} \times \underbrace{\overbrace{\beta\gamma} \boxtimes \overbrace{\mathbb{t} \times \mathbb{t}}}_{j+k} = \underbrace{\alpha\overbrace{\beta\gamma}} \boxtimes \underbrace{\mathbb{L} \times \overbrace{\mathbb{t} \times \mathbb{t}}}$$

$$= \underbrace{\overbrace{\alpha\beta}\gamma} \boxtimes \underbrace{\overbrace{\mathbb{L} \times \mathbb{t}} \times \mathbb{t}} = \overset{jk}{(-1)}\,\overset{ki}{(-1)}\,\underbrace{\overbrace{\alpha\beta} \boxtimes \overbrace{\mathbb{L} \times \mathbb{t}}}_{i+j} \times \underbrace{\gamma \boxtimes \mathbb{t}}_{k} = \overset{ij}{(-1)}\,\overset{jk}{(-1)}\,\overset{ki}{(-1)}\,\underbrace{\overbrace{\alpha \boxtimes \mathbb{L}}^{i} \times \overbrace{\beta \boxtimes \mathbb{t}}^{j}} \times \underbrace{\gamma \boxtimes \mathbb{t}}$$