

$$x:\begin{array}{c} e \\ X^\mu : \\ 0X^\mu \end{array} = \begin{cases} e^{-1}{}_0X^\mu \eta_{\mu\nu 0} X^\nu - em^2 \\ e^{-1}{}_0X^\mu \eta_{\mu\nu 0} X^\nu \end{cases} \qquad \text{m=0}$$

symmetries

$$\text{local} \begin{cases} \widehat{\mathfrak{b} \rtimes X}^\nu &= \mathfrak{b} \dot{X}^\nu \\ \mathfrak{b} \rtimes e &= \widehat{\mathfrak{b} e} \end{cases}$$

$$\text{global} \begin{cases} \widehat{X \rtimes \mathfrak{l} : \mathfrak{l}}^\nu &= X^\mu{}_\mu \mathfrak{l}^\nu + \mathfrak{l}^\nu \\ e \rtimes \mathfrak{l} : \mathfrak{l} &= 0 \end{cases}$$