

1

Examples of manifold 2-diagrams

Local shape of 2-strata:

$$\begin{aligned} (\bar{S}' \hookrightarrow \mathbb{R}^0) &= (\emptyset \hookrightarrow \mathbb{R}^0) \\ \Rightarrow \mathbb{R}^2 \times \text{Cone}(\bar{S}') &= \end{aligned}$$

Local shape of 1-strata:

$$(S^\circ \hookrightarrow \mathbb{R}^1) = \text{---} \overset{-1}{\bullet} \text{---} \overset{+1}{\bullet} \text{---}$$

S° has a unique stratification (S°, e)
(strata are its points)

$$\Rightarrow (\text{Cone}(S^\circ), \text{cone}(e)) = \text{---} \overset{-1}{\downarrow} \bullet \overset{+1}{\downarrow} \text{---}$$

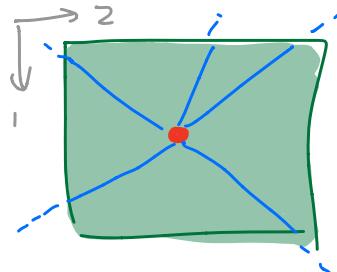
$$\Rightarrow \mathbb{R}^1 \times \text{Cone}(S^\circ) =$$

Local shape of 0-strata

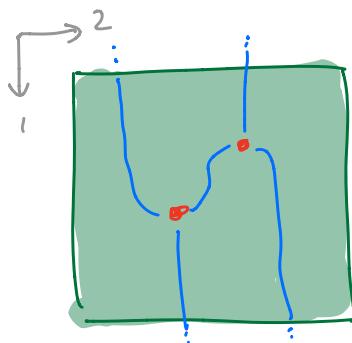
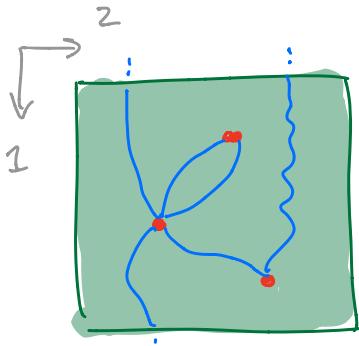
$$(S^1 \hookrightarrow \mathbb{R}^2) =$$

(S^1, e) can look like ~

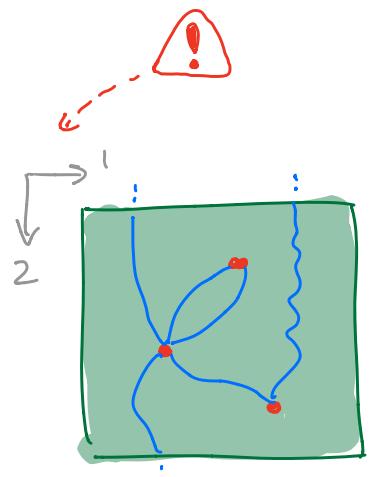
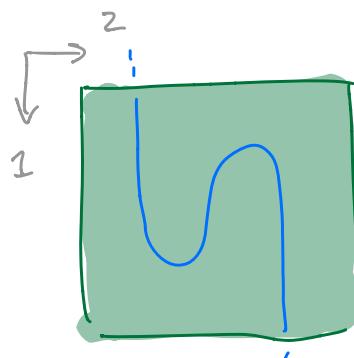
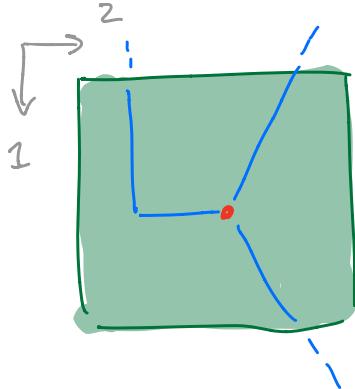
$$\Rightarrow \mathbb{R}^{\circ} \times (\text{cone}(S'), \text{cone}(e)) \sim$$



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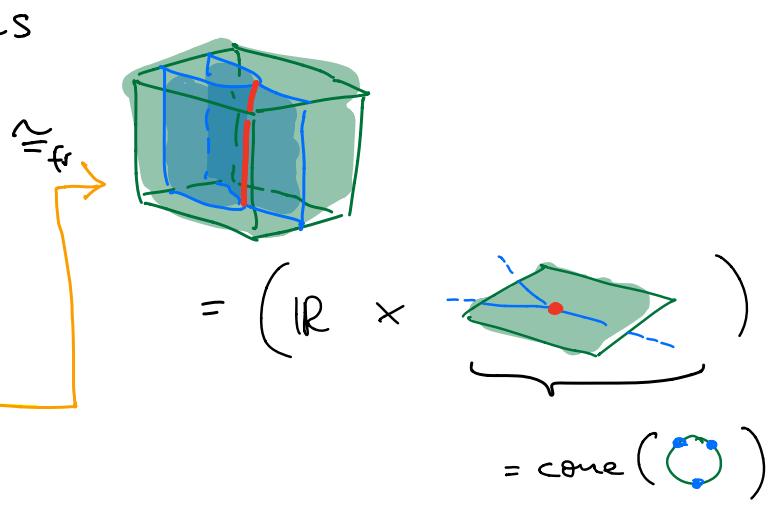
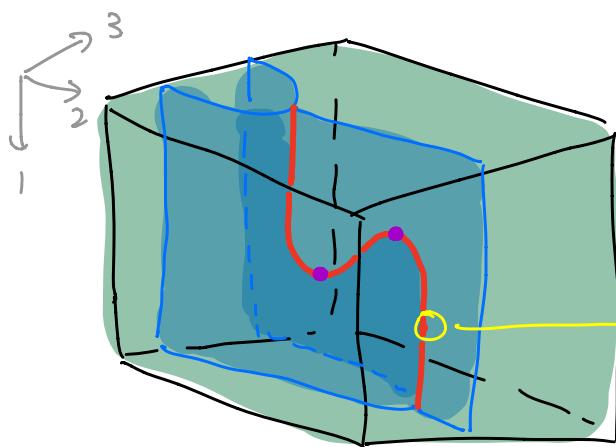


non examples



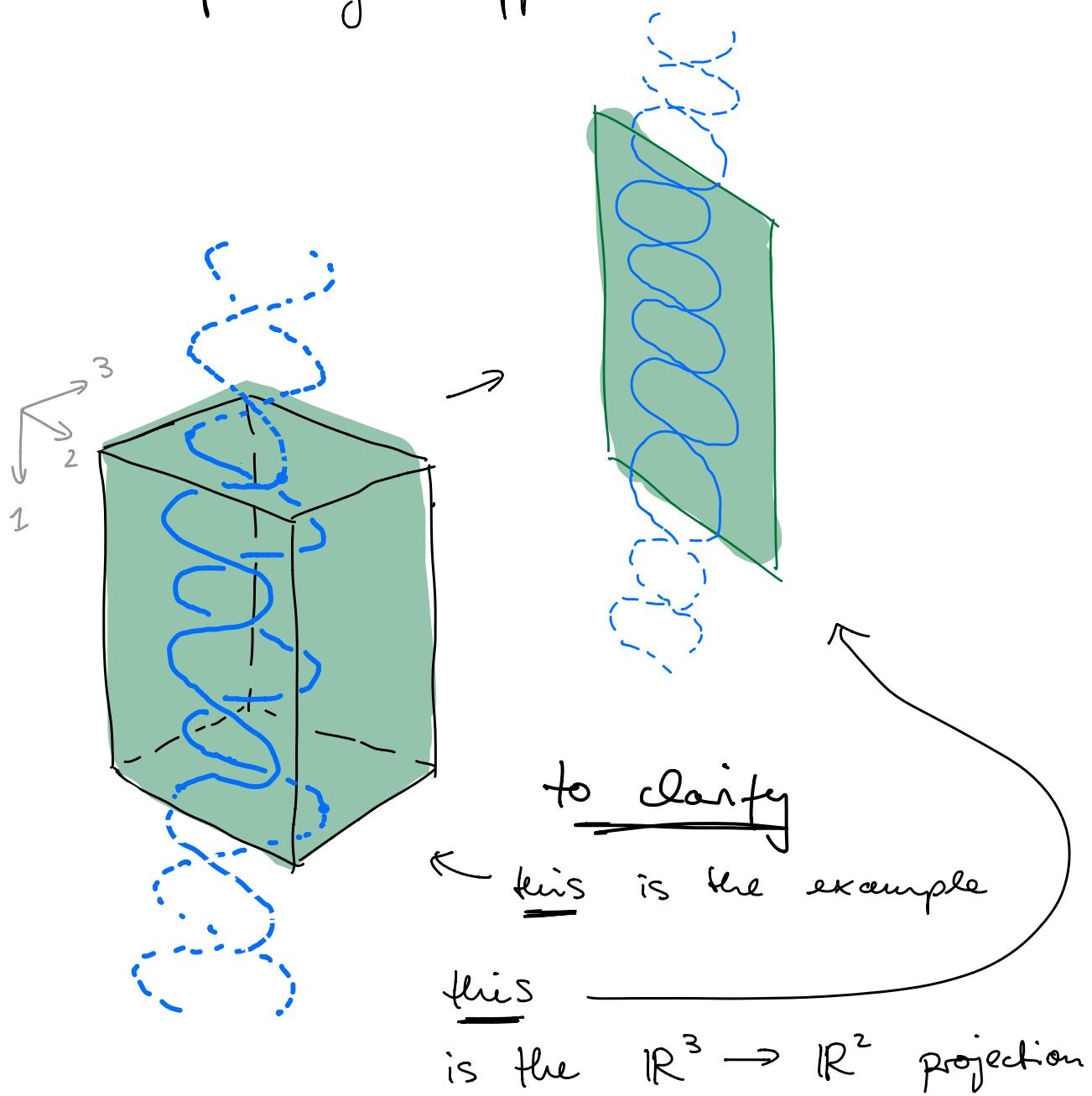
2

3-dim examples



3

framed conical , but not framed
compactly supported



Check conicity: ubds of blue strata

$$\stackrel{\approx}{=}_{\text{fr}} \begin{array}{c} \text{green cube with blue wavy lines} \\ = \mathbb{R} \times \begin{array}{c} \text{green parallelogram with blue dot} \\ = \text{cone}(\bullet) \end{array} \end{array}$$