

claim if $x, y \in \mathfrak{g}$ (ax Lie algebra)
 metrized

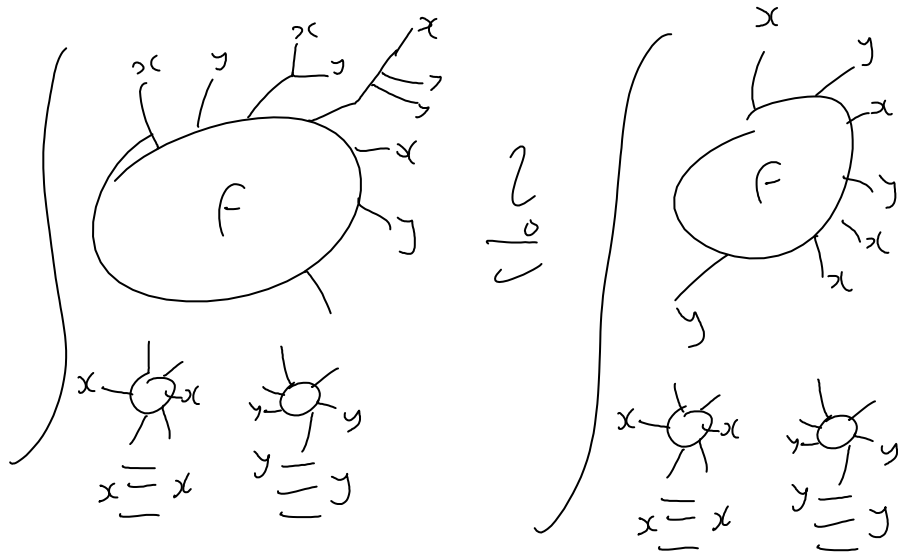
then

$$\text{Orb}(x) \times \text{Orb}(y) \begin{array}{c} \xrightarrow{\quad} \\ \xrightarrow{\quad} \end{array} \mathfrak{g}(z)$$

\mathcal{B}

produce the same pushforward measure.

The direct approach: Pullback a function F in \mathfrak{z}
 & multiply by Gaussians in \mathfrak{x} & \mathfrak{y} . Will it
 work?
 perturbed



* F need not be invariant ∇

BCH can be interpreted as a function
 $\mathfrak{y} \times \mathfrak{y} \rightarrow \mathfrak{g}$. As such, what is its integral
 against a Gaussian?