4. $\Psi^{-\infty}_{\mathrm{Iso}}(n)$ is an infinite matrix algebra

– 'topologically'

$$HH_k(\Psi^{-\infty}_{\mathrm{Iso}}(n)) = \begin{cases} \mathbb{C} & k=0 \\ \{0\} & k>0. \end{cases}$$

Hochschild homology

Unique trace functional (as no higher ones)

- $\mathrm{Tr}(A) = \int_{\mathbb{R}^n} A(x,x)\,dx.$

- $\mathrm{Tr}([A,B]) = 0$

- Consistent with trace of matrices.