

LY 29 TLV -&gt; YYZ

7:07 PM

$$m: V \otimes V \rightarrow V \quad M: V^* \otimes V^* \rightarrow V^*$$

$$\langle ab, \psi\phi \rangle = \text{tr}(\hat{a} //$$



I don't know how to write the Hopf algebra axioms as a computability rule between a product on  $\mathcal{A}$  vs. and its dual.

$$\langle ab, \psi \rangle = \langle a\psi_1 \rangle \langle b\psi_2 \rangle$$

$$\langle ab, \psi\phi \rangle = \langle a_1(\psi\phi)_1 \rangle \langle b_1(\psi\phi)_2 \rangle =$$

$$= \langle a_1\psi_1\phi_1 \rangle \langle b_1\psi_2\phi_2 \rangle$$

$$= \langle a_1\psi_1 \rangle \langle a_2\phi_1 \rangle \langle b_1\psi_2 \rangle \langle b_2\phi_2 \rangle$$