Details Talk (was)

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on board: $H=\langle a,x\rangle/[a,x]=\gamma x$

w/ $\Delta a = a_1+a_2$, $\Delta x = x_1 + A_1 x_2$ w/ $A=\ell^{-\frac{\hbar}{2}\epsilon a}$

& call $(a,x)^* = (\hbar b, \hbar y)$ & form "quantum double":

$$U_{\hbar,\gamma,\epsilon} = \langle y,a,x,t=\epsilon a-\gamma b\rangle \Big/ \begin{matrix}[a,x]=\gamma x & [a,y]=-\gamma y \\ +\text{ central} & q=\ell^{-\hbar\gamma\epsilon}\end{matrix}$$

$$xy-qyx=(1-\ell^{\hbar t}A^2)/\hbar$$

Has a 2D rep Enter

& Has $R=?_0=\Phi(b\,y\otimes a\,x : \ell^{\hbar ba}\ell^{\hbar yx}(1+\epsilon?+\dots)$

Go simpler:

$$\hat{U}_\epsilon = \langle y,a,x,t\rangle \Big/ \begin{matrix}+\text{ central},\ [a,x]=x,\ [a,y]=-y \\ [x,y]=t-2\epsilon a\end{matrix}$$

$$\deg x,t,\epsilon = 1 \quad \deg a,y = 0$$

$$R=\Phi(y\otimes a\,x : \ell^{ta}\ell^{yx}(1+\epsilon\dots)$$