

CU and standard sl2, QU and standard quantum sl2

February 5, 2018 9:28 AM

$$sl_2: [H, X^+] = 2X^+ \quad [H, X^-] = -2X^- \quad [X^+, X^-] = H$$

$$CU: [a, x] = \gamma x \quad [a, y] = -\gamma y \quad [x, y] = 2\epsilon a - t$$

Easy to put sl_2 in CU, Is the CU information retained in sl_2 ?

[CP 6.4.3 (27)]:

$$[H, X^+] = 2X^+ \quad [H, X^-] = -2X^- \quad [X^+, X^-] = \frac{e^{hH} - e^{-hH}}{e^h - e^{-h}}$$

CS-PPSA:

$$[a, x] = \gamma x \quad [a, y] = -\gamma y \quad [x, y] = \frac{1 - e^{kt} e^{-2k\epsilon a}}{k}$$