

Rescaling Manin triples

January 28, 2017 5:14 PM

$$[U, U] = U, [L, L] = \epsilon L, [L, U] = L + \epsilon U.$$

Jacobi in $U \otimes U \otimes U$ ✓

$$U \otimes U \times L: \begin{array}{ccc} [[u, v], l] + [[l, u], v] + [[v, l], u] \\ \downarrow \quad \quad \downarrow \quad \quad \downarrow \\ L + \epsilon U \quad L + \epsilon U \quad L + \epsilon U \end{array}$$

$$U \otimes L \otimes L: \begin{array}{ccc} [[l, m], u] + [[m, u], l] + [[u, l], m] \\ \downarrow \quad \quad \downarrow \quad \quad \downarrow \\ \epsilon L + \epsilon^2 U \quad \epsilon L + \epsilon^2 U \quad \epsilon L + \epsilon^2 U \end{array}$$

checks!