

## Quantum moduli algebras at roots of unity

*vendredi 24 mars 2023 11:30 (45 minutes)*

We prove that the graph algebra and the quantum moduli algebra associated to a punctured sphere and complex semisimple Lie algebra  $\mathfrak{g}$  are Noetherian rings and finitely generated rings over

$mc(q)$ . Moreover, we show that these two properties still hold on

$mc[q, q^{-1}]$  for the integral version of the graph algebra.

We also study the specializations

$Ll_{0,n}^e$  of the graph algebra

at a root of unity

$e$  of odd order, and show that

$Ll_{0,n}^e$  and

its invariant algebra under the quantum group  $U_{e(\mathfrak{g})}$

have classical fraction algebras which are central simple algebras of PI degree that we compute.

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