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*Hochschild cohomology of 3-dimensional Sridharan algebras*

A Sridharan enveloping algebra of a finite dimensional Lie algebra is a cocycle deformation of a cocommutative Hopf algebra or a Poincaré-Birkhoff-Witt deformation of a polynomial algebra. The class of Sridharan algebras contains many interesting algebras, such as Weyl algebras. In [Nus91], Nuss listed all non isomorphic Sridharan enveloping algebras of 3-dimensional Lie algebras. Some of the homological properties of Sridharan enveloping algebras have already been studied (see [HVOZ10] and references therein). In this talk I will describe the algebra structure of the Hochschild cohomology of these algebras. This is joint work with Sergio Chouhy and Sofia D'Alesio.

#### References

[HVOZ10] J.-W. He, F. Van Oystaeyen, and Y. Zhang, Cocommutative Calabi-Yau Hopf algebras and deformations, *J. Algebra* 324 (2010), no. 8, 1921–1939, DOI 10.1016/j.jalgebra.2010.06.010.

[Nus91] P. Nuss, L'homologie cyclique des algèbres enveloppantes des algèbres de Lie de dimension trois, *J. Pure Appl. Algebra* 73 (1991), no. 1, 39–71, DOI 10.1016/0022-4049(91)90105-B.