1100-16-300 Anthony Giaquinto* (tonyg@math.luc.edu) and Murray Gerstenhaber

(mgersten@math.upenn.edu). On the cohomology of the Weyl algebra, the quantum plane, and the q-Weyl algebra.

Deformation theory can be used to compute the cohomology of a deformed algebra with coefficients in itself from that of the original. The invariance of the Euler-Poincare characteristic of the Hochschild complex the under deformation is applied to compute the cohomology of the Weyl algebra, the algebra of the quantum plane, and the q-Weyl algebra. For details, see http://dx.doi.org/10.1016/j.jpaa.2013.10.006 (Received February 10, 2014)