

Meeting: 1004, Bowling Green, Kentucky, SS 15A, Special Session on Recent Advances in Noncommutative Algebra

1004-16-96 **Ragnar Buchweitz** (ragnar@math.toronto.edu), Department of Mathematics, University of Toronto, 100 Saint George St, Toronto, ON M5S 1A1, Canada, **Edward L. Green*** (green@math.vt.edu), Department of Mathematics, 460 McBryde Hall, Blacksburg, VA 24061, **Dag Madsen** (dagma@math.ntnu.no), Institutt for matematiske fag, Institutt for matematiske fag, 7491 Trondheim, Trondheim, Norway, and **Oeyvind Solberg** (oyvinso@math.ntnu.no), Institutt for matematiske fag, NTNU, 7491 Trondheim, Trondheim, Norway. *On a question of Happel.*

Dieter Happel asked if A is a finite dimensional algebra such that the Hochschild cohomology groups $HH^n(A)$ vanish for sufficiently large n , is A of finite global dimension. We show the answer is no by exhibiting the Hochschild cohomology ring for the quantum exterior algebra in two variables. (Received January 19, 2005)