UWE NAGEL, University of Kentucky

On the Weak Lefschetz Property for Artinian Gorenstein algebras

It is an open problem whether all height three graded Artinian Gorenstein algebras have the Weak Lefschetz Property. We show that it is enough to establish this for all compressed Gorenstein algebras of odd socle degree. Then we discuss the first open case, namely algebras with Hilbert function $(1, 3, 6, 6, 3, 1)$.

This is joint work with Mats Boij, Juan Migliore, Rosa M. Miró-Roig, and Fabrizio Zanello.