

# Local cohomology, Frobenius closure and test elements

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In this talk we illustrate the relevance of certain top local cohomology modules to the study of problems related to tight closure. We do so by solving two problems:

- (a) the existence of "test-exponents" for parameter ideals in generalized Cohen-Macalalay rings, and
- (b) the computation of the test-ideal in Gorenstein rings.