

F-modules for rings with FFRT, and applications to local cohomology

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For a regular ring R of positive characteristic, an F-module over R is an R -module equipped with an "action of Frobenius". The theory of these F-modules has been used successfully in establishing finiteness properties of local cohomology, and in this talk I will present an extension to the case where R is allowed to have mild singularities (known as finite F-representation type, or FFRT for short). I will then illustrate how this theory can be used to extend previous results on local cohomology to the FFRT case.