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Non-commutative resolutions of non-normal rings

In this talk we consider non-commutative analogs of resolutions of singularities for not-necessarily normal commutative rings. These non-commutative resolutions of commutative rings R are endomorphism rings of certain R -modules of finite global dimension. We will in particular consider Van den Bergh's non-commutative crepant resolutions (NCCRs) and non-commutative resolutions (NCRs) as recently defined by Dao, Iyama, Takahashi and Vial. We give some conditions and obstructions for existence of NC(C)Rs over certain non-normal rings. This is joint work with H. Dao and C. Ingalls.