

1. Record Nr.	UNINA9910817266103321
Autore	Kussin Dirk <1967->
Titolo	Noncommutative curves of genus zero : related to finite dimensional algebras / / Dirk Kussin
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 2009 ©2009
ISBN	1-4704-0556-3
Descrizione fisica	1 online resource (146 p.)
Collana	Memoirs of the American Mathematical Society, , 0065-9266 ; ; Volume 201, Number 942
Disciplina	516.3/52
Soggetti	Curves, Algebraic Representations of rings (Algebra) Noncommutative algebras
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Volume 201, Number 942 (first of 5 numbers)."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Contents""; ""Introduction""; ""Chapter 0. Background""; ""0.1. Notation""; ""0.2. One-parameter families, generic modules and tameness""; ""0.3. Canonical algebras and exceptional curves""; ""0.4. Tubular shifts""; ""0.5. Tame bimodules and homogeneous exceptional curves""; ""0.6. Rational points""; ""Part 1. The homogeneous case""; ""Chapter 1. Graded factoriality""; ""1.1. Efficient automorphisms""; ""1.2. Prime ideals and universal extensions""; ""1.3. Prime ideals as annihilators""; ""1.4. Noetherianness""; ""1.5. Prime ideals of height one are principal"" ""1.6. Unique factorization""""1.7. Examples of graded factorial domains""; ""The non-simple bimodule case""; ""The quaternion case""; ""The square roots case""; ""Chapter 2. Global and local structure of the sheaf category""; ""2.1. Serre's theorem""; ""2.2. Localization at prime ideals""; ""2.3. Noncommutativity and the multiplicities""; ""2.4. Localizing with respect to the powers of a prime element""; ""2.5. Zariski topology and sheafification""; ""Chapter 3. Tubular shifts and prime elements""; ""3.1. Central prime elements""; ""3.2. Non-central prime elements and ghosts"" ""Chapter 4. Commutativity and multiplicity freeness""""4.1. Finiteness over the centre""; ""4.2. Commutativity of the coordinate algebra"";

""4.3. Commutativity of the function field""; ""Chapter 5. Automorphism groups""; ""5.1. The automorphism group of a homogeneous curve""; ""5.2. The structure of $\text{Aut}(H)$ ""; ""5.3. The twisted polynomial case""; ""5.4. On the Auslander-Reiten translation as functor""; ""5.5. The quaternion case""; ""5.6. The homogeneous curves over the real numbers""; ""5.7. Homogeneous curves with finite automorphism group""; ""Part 2. The weighted case""

""Chapter 6. Insertion of weights""""6.1. p -cycles""; ""6.2. Insertion of weights into central primes""; ""6.3. Automorphism groups for weighted curves""; ""Chapter 7. Exceptional objects""; ""7.1. Transitivity of the braid group action""; ""7.2. Exceptional objects and graded factoriality""; ""Chapter 8. Tubular exceptional curves""; ""8.1. Slope categories and the rational helix""; ""8.2. The index of a tubular exceptional curve""; ""8.3. A tubular curve of index three""; ""8.4. A related tubular curve of index two""; ""8.5. Line bundles which are not exceptional""

""Appendix A. Automorphism groups over the real numbers""""A.1. Tables for the domestic and tubular cases""; ""Appendix B. The tubular symbols""; ""Bibliography""; ""Index""; ""A""; ""C""; ""D""; ""E""; ""F""; ""G""; ""H""; ""I""; ""K""; ""L""; ""M""; ""O""; ""P""; ""Q""; ""R""; ""S""; ""T""; ""U""
