

endpapers

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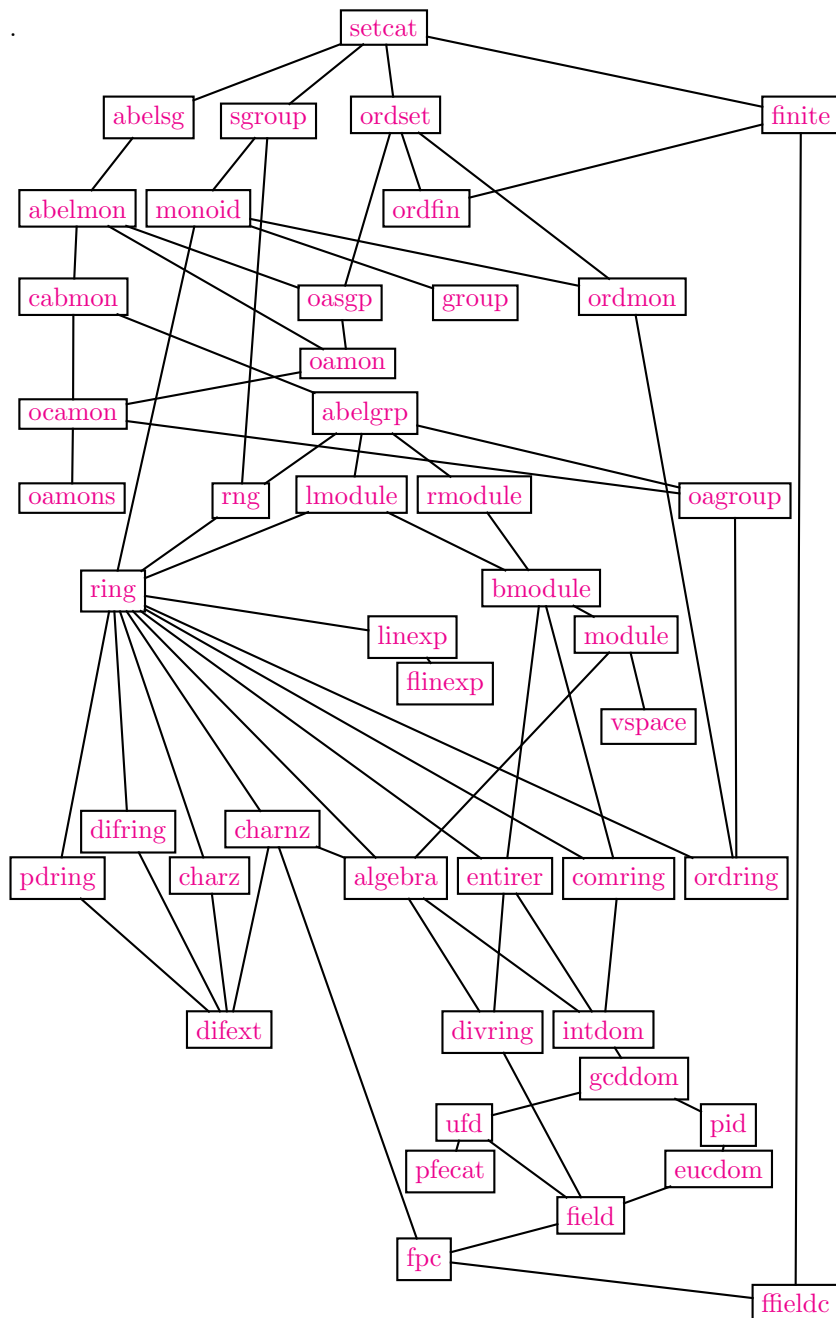
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## 0.1 Basic Algebra Hierarchy Diagram

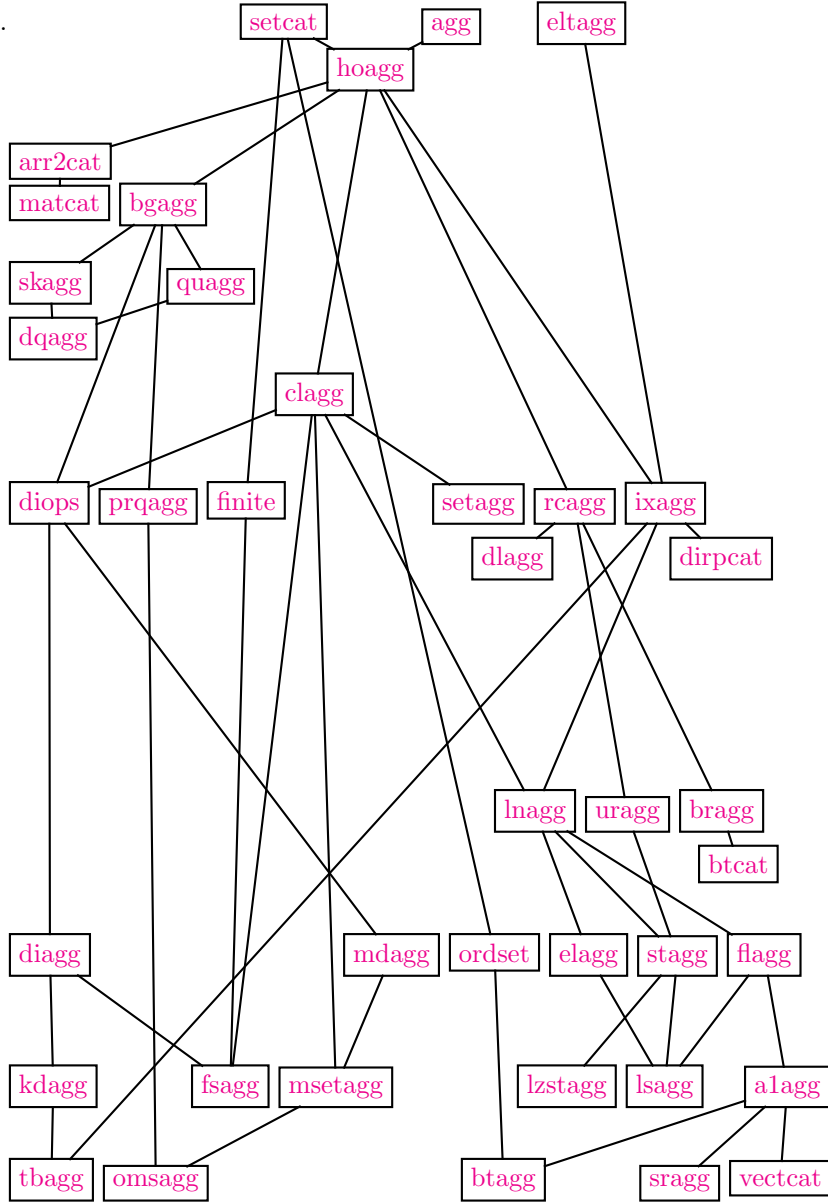


## 0.2 Basic Algebra Hierarchy

SETCAT SetCategory  
 ABELSG AbelianSemiGroup  
 SGROUP SemiGroup  
 ORDSET OrderedSet  
 FINITE Finite  
 ABELMON AbelianMonoid  
 MONOID Monoid  
 ORDFIN OrderedFinite  
 CABMON CancellationAbelianMonoid  
 OASGP OrderedAbelianSemiGroup  
 GROUP Group  
 ORDMON OrderedMonoid  
 OAMON OrderedAbelianMonoid  
 OCAMON OrderedCancellationAbelianMonoid  
 ABELGRP AbelianGroup  
 OAMONS OrderedAbelianMonoidSup  
 RNG Rng  
 LMODULE LeftModule  
 RMODULE RightModule  
 OAGROUP OrderedAbelianGroup  
 RING Ring  
 BMODULE BiModule  
 LINEXP LinearlyExplicitRingOver  
 MODULE Module  
 FLINEXP FullyLinearlyExplicitRingOver  
 VSPACE VectorSpace  
 DIFRING DifferentialRing  
 CHARNZ CharacteristicNonZero  
 PDRING PartialDifferentialRing  
 CHARZ CharacteristicZero  
 ALGEBRA Algebra  
 ENTIRER EntireRing  
 COMRING CommutativeRing  
 ORDRING OrderedRing  
 DIFEXT DifferentialExtension  
 DIVRING DivisionRing  
 INTDOM IntegralDomain  
 GCDDOM GcdDomain  
 UFD UniqueFactorizationDomain  
 PID PrincipalIdealDomain  
 PFECAT PolynomialFactorizationExplicit  
 EUCDOM EuclideanDomain  
 FIELD Field  
 FPC FieldOfPrimeCharacteristic

**FFIELDC FiniteFieldCategory**

### 0.3 Data Structure Hierarchy Diagram



## 0.4 Data Structure Hierarchy Diagram

SETCAT SetCategory  
AGG Aggregate  
ELTAGG EltableAggregate  
HOAGG HomogeneousAggregate  
ARR2CAT TwoDimensionalArrayCategory  
MATCAT MatrixCategory  
BGAGG BagAggregate  
SKAGG StackAggregate  
QUAGG QueueAggregate  
DQAGG DequeueAggregate  
CLAGG Collection  
DIOPS DictionaryOperations  
PRQAGG PriorityQueueAggregate  
FINITE Finite  
SETAGG SetAggregate  
RCAGG RecursiveAggregate  
IXAGG IndexedAggregate  
DLAGG DoublyLinkedAggregate  
DIRPCAT DirectProductCategory  
LNAGG LinearAggregate  
URAGG UnaryRecursiveAggregate  
BRAGG BinaryRecursiveAggregate  
BTCAT BinaryTreeCategory  
DIAGG Dictionary  
MDAGG MultiDictionary  
ORDSET OrderedSet  
ELAGG ExtensibleLinearAggregate  
STAGG StreamAggregate  
FLAGG FiniteLinearAggregate  
KDAGG KeyedDictionary  
FSAGG FiniteSetAggregate  
MSETAGG MultisetAggregate  
LZSTAGG LazyStreamAggregate  
LSAGG ListAggregate  
A1AGG OneDimensionalArrayAggregate  
TBAGG TableAggregate  
OMSAGG OrderedMultiSetAggregate  
BTAGG BitAggregate  
SRAGG StringAggregate  
VECTCAT VectorCategory



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