

XMod version 2.002 – old and new names

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Crossed Modules

Source(X) Range(X) Boundary(X) X.aut X.action XModName	Source(X) Range(X) Boundary(X) (now for PreXMods) AutoGroup(X) XModAction(X) SetName
XMod IsXMod XModPrint ConjugationXMod CentralExtensionXMod AutomorphismXMod InnerAutomorphismXMod TrivialActionXMod RModuleXMod XModSelect	XMod, XModByBoundaryAndAction IsXMod Display XModByNormalSubgroup XModByCentralExtension XModByGroupOfAutomorphisms, XModByAutomorphismGroup XModByInnerAutomorphismGroup XModByTrivialAction XModByAbelianModule
IsConjugation IsSimplyConnected IsCentralExtension IsAutomorphismXMod IsTrivialAction IsRModule IsZeroBoundary WhatTypeXMod DirectProduct SubXMod IsSubXMod IdentitySubXMod IsNormalSubXMod NormalSubXMods FactorXMod	IsNormalSub2dObject IsCentralExtension2dObject IsAutomorphismGroup2dObject IsTrivialAction2dObject IsAbelianModule2dObject DirectProductOp SubXMod IsSubXMod IdentitySubXMod IsNormalSub2dObject NormalSubXMods

Crossed module morphisms

XModMorphism	XModMorphism, XModMorphismByHoms
IsXModMorphism	IsXModMorphism
mor.sourceHom	SourceHom
mor.rangeHom	RangeHom
XModMorphismPrint	Display
XModMorphismName	SetName
InclusionMorphism	
ImageXModMorphism	ImagesSource
InnerAutomorphism	InnerAutomorphismXMod
CompositeMorphism	CompositionMorphism
Source XModXPMorphism	

Cat1-groups

Cat1	Cat1
IsCat1	IsCat1
C.tail	Tail(C) (now for PreCat1s)
C.head	Head(C) (now for PreCat1s)
C.embedRange	RangeEmbedding(C)
C.embedKernel	KernelEmbedding(C)
C.kernel	
C.boundary	
Cat1Print	Display
Cat1Name	SetName
ConjugationCat1	Cat1ByNormalSubgroup
XModCat1	XModOfCat1
Cat1XMod	Cat1OfXMod
SemidirectCat1XMod	
ReverseCat1	Reverse
Cat1Select	(none)
SubCat1	SubCat1
IsSubCat1	IsSubCat1
IdentitySubCat1	IdentitySubCat1
NormalSubCat1s	
AllCat1s	(none)

Morphisms of cat1-groups

Cat1Morphism	Cat1Morphism, Cat1MorphismByHoms
IsCat1Morphism	IsCat1Morphism
Cat1MorphismPrint	Display
Cat1MorphismName	SetName
Cat1MorphismSourceHomomorphism	
ReverseIsomorphismCat1	ReverseIsomorphism
Cat1MorphismXModMorphism	Cat1MorphismOfXModMorphism
XModMorphismCat1Morphism	XModMorphismOfCat1Morphism

Derivations

XModDerivationByImages	DerivationByImages, DerivationByImagesNC
IsDerivation	IsDerivation
chi.genimages	GeneratorImages(chi)
chi.genpos	ImagePositions(chi)
DerivationImage	DerivationImage
DerivationImages	
InnerDerivation	PrincipalDerivation
ListInnerDerivations	PrincipalDerivations
IsRegular	IsRegularDerivation
RegularDerivations	RegularDerivations
AllDerivations	AllDerivations
DerivationsSorted	
DerivationTable	
AreDerivations	
DerivationSection	DerivationBySection
CompositeDerivation	CompositeDerivation
WhiteheadGroupTable	WhiteheadGroupTable
WhiteheadMonoidTable	WhiteheadMonoidTable
InverseDerivations	InverseDerivations
ListInverseDerivations	ListInverseDerivations
SourceEndomorphismDerivation	SourceEndomorphism (for UpMappings)
TableSourceEndomorphismDerivations	
RangeEndomorphismDerivation	RangeEndomorphism (for UpMappings)
TableRangeEndomorphismDerivations	
XModEndomorphismDerivation	Object2dEndomorphism (for UpMappings)

Sections

Cat1SectionByImages	SectionByImages, SectionByImagesNC
IsSection	IsSection
SectionImage	SectionImage
SectionImages	
InnerSection	PrincipalSection
ListInnerSections	PrincipalSections
IsRegular	IsRegularSection
RegularSections	RegularSections
AllSections	AllSections
AreSections	
SectionDerivation	SectionByDerivation
CompositeSection	CompositeSection
SourceEndomorphismSection	SourceEndomorphism
RangeEndomorphismSection	RangeEndomorphism
Cat1EndomorphismSection	Object2dEndomorphism

Actors

ActorSquareRecord	
WhiteheadPermGroup	WhiteheadPermGroup
Whitehead	WhiteheadXMod
AutomorphismPermGroup	AutomorphismPermGroup
XModMorphismAutoPerm	
ImageAutomorphismDerivation	ImageAutomorphismDerivation
Norrie	NorrieXMod
Lue	LueXMod
Actor	ActorXMod, ActorCat1
InnerMorphism	InnerMorphism
InnerActor	InnerActorXMod

Induced constructions

InducedXMod	InducedXMod
AllInducedXMods	AllInducedXMods
InducedCat1	InducedCat1
AllInducedCat1s	AllInducedCat1s

Utilities

InclusionMorphism	InclusionMapping
ZeroMorphism	ZeroMapping
EndomorphismClasses	EndomorphismClasses
EndomorphismImages	EndomorphismImages
IdempotentImages	IdempotentImages
InnerAutomorphismGroup	InnerAutomorphismGroup
IsAutomorphismGroup	
AutomorphismPair	
IsAutomorphismPair	
AutomorphismPermGroup	
IsRModule	IsAbelianModule
FpPair	
IsFpPair	
SemidirectPair	
IsSemidirectPair	
PrintList	Display
DistinctRepresentatives	DistinctRepresentatives
CommonRepresentatives	CommonRepresentatives
CommonTransversal	CommonTransversal
IsCommonTransversal	IsCommonTransversal