

FrancyMonoids

FrancyMonoids/A package to display commutative monoid objects with francy

0.1

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Chapter 1

FrancyMonoids automatic generated documentation

1.1 FrancyMonoids automatic generated documentation of methods

1.1.1 DrawFactorizationGraph (for IsRectangularTable)

▷ DrawFactorizationGraph(f) (operation)

Returns: a drawing

f is a set of factorizations Draws the graph of factorizations associated to f : a complete graph whose vertices are the elements of f . Edges are labelled with distances between nodes they join. Kruskal algorithm is used to draw in red a spanning tree with minimal distances. Thus the catenary degree is reached in the edges of the tree.

1.1.2 DrawEliahouGraph (for IsRectangularTable)

▷ DrawEliahouGraph(f) (operation)

Returns: a drawing

f is a set of factorizations Draws the Eliahou graph of factorizations associated to f : a graph whose vertices are the elements of f , and there is an edge between two vertices if they have common support. Edges are labelled with distances between nodes they join.

1.1.3 DrawRosalesGraph (for IsHomogeneousList,IsAffineSemigroup)

▷ DrawRosalesGraph(n, s) (operation)

Returns: a drawing

s is either a numerical semigroup or an affine semigroup, and n is an element of s Draws the graph associated to n in s .

1.1.4 DrawRosalesGraph (for IsInt,IsNumericalSemigroup)

▷ DrawRosalesGraph($arg1, arg2$) (operation)

1.2 FrancyMonoids automatic generated documentation of global functions

1.2.1 DrawOverSemigroupsNumericalSemigroup

▷ `DrawOverSemigroupsNumericalSemigroup(s)` (function)

Returns: a drawing

Draws the Hasse diagram of `oversemigroupstree` of the numerical semigroup `s`. Irreducible numerical semigroups are highlighted.

1.2.2 DrawTreeOfSonsOfNumericalSemigroup

▷ `DrawTreeOfSonsOfNumericalSemigroup(s, l, generators)` (function)

Returns: a drawing

Draws the tree of sons of numerical semigroups up to level `l` with respect to the minimal system of generators given by the function `generators`.

1.2.3 DrawHasseDiagramOfNumericalSemigroup

▷ `DrawHasseDiagramOfNumericalSemigroup(s, A)` (function)

Returns: a drawing

plots a graph whose set of vertices is `A`, which is a finite set of integers, and whose edges are provided by the order of the numerical semigroup `s`.

1.2.4 DrawTreeOfGluingsOfNumericalSemigroup

▷ `DrawTreeOfGluingsOfNumericalSemigroup(s[, expand])` (function)

Returns: a drawing

Returns a Francy canvas with the tree of gluings of the numerical semigroup `s`. If the optional argument `expand` is provided, then the tree is drawn fully expanded.

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