

Local Action Diagrams

**Super awesome package for local action
diagrams.**

0.1

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Chapter 1

Introduction

1.1 Constructing Local Action Diagrams

1.1.1 Constructing From Data

▷ `LocalActionDiagramFromData(D , v_labels , e_labels , rev)` (operation)

▷ `LocalActionDiagramFromDataNC(D , v_labels , e_labels , rev)` (operation)

Returns: A local action diagram.

Constructs a local action diagram, checking that the arguments given are a valid local action diagram. The argument D is a digraph and rev must be a compatible involution on the edges of D . The argument v_labels is a list of vertex labels such that $v_labels[i]$ is the group labelling vertex i of D .

The argument e_labels is a list of edge labels. The edges of D are stored in lexicographical order and $edge_labels[i]$ is the set labelling edge i of D (when sorted in lexicographical order).

The NC variant of the operation does not check that the arguments given are a valid local action diagram.

1.1.2 LocalActionDiagramUniversalGroup (for IsPermGroup)

▷ `LocalActionDiagramUniversalGroup(arg)` (operation)

Constructs a local action diagram corresponding to the Burger-Moses group $U(F)$.

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