

# UnitalSZ

## Algorithms and library of unitals of projective planes

0.2

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# Chapter 1

## UnitalSZ automatic generated documentation

### 1.1 UnitalSZ automatic generated documentation of global functions

#### 1.1.1 AU\_UnitalBlistList\_axiomcheck

▷ AU\_UnitalBlistList\_axiomcheck(*arg*) (function)

**Returns:**

Insert documentation for you function here

#### 1.1.2 IsAU\_UnitalBlistList

▷ IsAU\_UnitalBlistList(*bmat*) (function)

**Returns:** true if *bmat* is the blist list of an abstract unital.

Each row of *bmat* corresponds to a block of the unital. We check the sizes of the blocks and the sizes of the intersections of the dual blocks. Wrong *bmat* matrix size drops error.

#### 1.1.3 IsAU\_UnitalIncidenceMatrix

▷ IsAU\_UnitalIncidenceMatrix(*arg*) (function)

**Returns:**

Insert documentation for you function here

#### 1.1.4 IsAU\_UnitalBlockDesign

▷ IsAU\_UnitalBlockDesign(*arg*) (function)

**Returns:**

Insert documentation for you function here

#### 1.1.5 AU\_UnitalByBlistListNC

▷ AU\_UnitalByBlistListNC(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.6 AU\_UnitalByBlistList

▷ AU\_UnitalByBlistList(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.7 AU\_UnitalByDesignBlocks

▷ AU\_UnitalByDesignBlocks(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.8 AU\_UnitalByIncidenceMatrix

▷ AU\_UnitalByIncidenceMatrix(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.9 AU\_HermitianAbstractUnital

▷ AU\_HermitianAbstractUnital(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.10 AU\_ReadLibraryDataFromFiles

▷ AU\_ReadLibraryDataFromFiles(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.11 AU\_InitLibraryData

▷ AU\_InitLibraryData(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.12 AU\_BBTUnital

▷ AU\_BBTUnital(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.13 AU\_KNPUnital

▷ AU\_KNPUnital(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.14 AU\_KrcadinacUnital

▷ AU\_KrcadinacUnital(*arg*) (function)

**Returns:**

Insert documentation for you function here

### 1.1.15 AU\_LibraryInfo

▷ AU\_LibraryInfo(*arg*) (function)

**Returns:**

Insert documentation for you function here

## 1.2 UnitalSZ automatic generated documentation of attributes

### 1.2.1 PointsOfUnital (for IsAU<sub>UnitalDesign</sub>)

▷ PointsOfUnital(*arg*) (attribute)

**Returns:**

Insert documentation for you function here

### 1.2.2 BlocksOfUnital (for IsAU<sub>UnitalDesign</sub>)

▷ BlocksOfUnital(*arg*) (attribute)

**Returns:**

Insert documentation for you function here

### 1.2.3 PointNamesOfUnital (for IsAU<sub>UnitalDesign</sub>)

▷ PointNamesOfUnital(*arg*) (attribute)

**Returns:**

Insert documentation for you function here

### 1.2.4 IncidenceDigraph (for IsAU<sub>UnitalDesign</sub>)

▷ IncidenceDigraph(*arg*) (attribute)

**Returns:**

Insert documentation for you function here

### 1.2.5 AutomorphismGroup (for IsAU<sub>UnitalDesign</sub>)

▷ AutomorphismGroup(*arg*) (attribute)

**Returns:**

Insert documentation for you function here

### 1.2.6 FullPointsOfUnital (for IsAU<sub>UnitalDesign</sub>)

▷ FullPointsOfUnital( $U$ ) (attribute)

**Returns:** The list of records containing the triples  $(b_1, b_2, P)$ , where  $P$  is a full point of  $U$  w.r.t. the blocks  $b_1, b_2$ .

The point  $P$  is a full point of  $U$  w.r.t. the blocks  $b_1, b_2$  if  $P$  is not contained in  $b_1$  or  $b_2$ , and, the projection with center  $P$  from  $b_1$  to  $b_2$  is a well-defined bijection.

### 1.2.7 FullPointsOfUnitalRepresentatives (for IsAU<sub>UnitalDesign</sub>)

▷ FullPointsOfUnitalRepresentatives( $arg$ ) (attribute)

**Returns:**

Insert documentation for you function here

### 1.2.8 GeneratorsOfProjectivityGroupsOfUnital (for IsAU<sub>UnitalDesign</sub>)

▷ GeneratorsOfProjectivityGroupsOfUnital( $arg$ ) (attribute)

**Returns:**

Insert documentation for you function here

## 1.3 UnitalSZ automatic generated documentation of methods

### 1.3.1 Isomorphism (for IsAU<sub>UnitalDesign</sub>, IsAU<sub>UnitalDesign</sub>)

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

**Returns:**

Insert documentation for you function here

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