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# **SoSpaCATpy**

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**SOSPCATPY**

Social-spatial Community Assignment Test



**EXAMPLE**

*to do*





## 3.1 Submodules

### 3.1.1 sospcat.compare

### 3.1.2 sospcat.social

This module defines the methods for social community detection.

**get\_groups** (*a\_graph*, *method*='component\_infomap', *return\_form*='membership')

Return the grouping of the provided graph object using the specified method. The grouping is returned as a list of sets each holding all members of a group.

**Parameters**

- **a\_graph** (Graph) – The graph to partition
- **method** (*str* (default='component\_infomap')) – String specifying which method to use. If two methods should be used one after the other they should be separated by `_`. Default: 'component\_infomap' which will first consider all disconnected components as groups then apply infomap on all of those groups to optionally further split.
- **return\_form** (*str* (default='membership')) – Determines the format of how the social group structure should be returned. Options are:
  - 'membership': A list returning for each *index* node the group it belongs to.
  - 'memberlists': Dictionary with a list of members *value* for each group *key*.

**Returns members** – Depending on what was chosen for the *return\_form* attribute, either the membership dict, i.e. for each node (key) the group affiliation (value), or the memberlist dict, i.e. for each group (key) a list of nodes (value) is returned.

**Return type** `dict`

### 3.1.3 sospcat.spatial

## INDICES AND TABLES

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