

```
# -*- coding:utf-8 -*-
#
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# 2016-08-24
```

Modules

[itertools](#)[numpy](#)[matplotlib.pyplot](#)

Classes

[__builtin__.object](#)[DieCutting](#)

```
class DieCutting(__builtin__.object)
```

Methods defined here:

```
__init__(self, L=60, frames=1000, sample=3, beta=2.0, c=0.5, plot=False)
```

```
diecutting_one_cluster(self, width, height, x0, y0)
```

```
eval_subclusters(self, width, height, x0, y0)
```

```
get_cutting_sizes(self)
```

Create the cutting size list for simulation

```
self.X0: x coordinates of the left bottom corner
self.Y0: y coordinates of the left bottom corner
self.cutting_size_max_width: max width of the cutting size
self.cutting_size_max_height: max height of the cutting size
self.cutting_size_xs: cutting size list
self.cutting_size_ys: cutting size list
self.cutting_sizes: ndarray [[cutting_size_xs[0], cutting_size_ys[0]],
                             [cutting_size_xs[1], cutting_size_ys[1]],
                             ...
                             ]
```

In this funciton, cutting size is determined by which the whole region is in the cluster.

```
get_results_each_subclusters(self, sets)
```

```
indexes_one_edge(self, condition)
```

```
init(self)
```

```
start(self, result_set, visualize=True)
```

```
visualize_results(self)
```

Data descriptors defined here:

```
__dict__
    dictionary for instance variables (if defined)
```

```
__weakref__
    list of weak references to the object (if defined)
```

Functions

```
visualize_max_size_of_sub_cluster(self)
```

```
visualize_num_of_sub_clusters(self)
```

```
visualize_size_dist_of_sub_clusters(self)
```