

# **gtt\_ekn Manual**

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# 1 Function Manual

## 1.1 Outline

## 1.2 Notation

## 1.3 Functions

### 1.3.1 gtt\_ekn.nc

`gtt_ekn.nc(beta,p)`

:: It returns the value of the normalizing constant and its derivatives of the conditional hypergeometric distribution of two way contingency tables with fixed marginals

`return [Z,[[d_11 Z, d_12 Z, ...], ..., [d_m1 Z, d_m2 Z, ..., d_mn Z]]]`

`beta` List of row sums and column sums. All entries must be positive integer.

`p` The probabilities of the cells of the table.

- Details have not been written. See Japanese documents.

2x3 contingency table with the row sum [4,5] and the column sum [2,4,3].

```
[2237] gtt_ekn.nc([[4,5],[2,4,3]],[[1,1/2,1/3],[1,1,1]]);
[4483/124416, [ 353/7776 1961/15552 185/1728 ]
 [ 553/20736 1261/15552 1001/13824 ]]
```

English translation for other functions has not yet been written.

# **Index**

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