

Tuning and mutual info

[draft]

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Notes and memos on rate, tuning, mutual information.

Note: Dear Reader, please remember that you're the ultimate peer-reviewer of anything you read.

1 Synopsis

We have three time-dependent quantities: activity $a(t)$, position $\mathbf{r}(t) := (x(t), y(t))$, direction $\theta(t)$. The first is a generalized function¹, the second a 2D vector, the third an angle (periodic). We are interested in the statistical associations between the first and the second, the first and the third, and the first and the second & third jointly.

Bibliography

(‘de X ’ is listed under D , ‘van X ’ under V , and so on, regardless of national conventions.)

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¹ Egorov 1990a,b; Lighthill 1964.