

## A NOTE OF ZUK'S CRITERION

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**Abstract.** Zuk's criterion give us a condition for a finitely generated group to have Property (T): the smallest non - zero eigenvalue of Laplace operator  $\Delta_\mu$  corresponding to the simple random walk on  $\mathcal{G}(S)$  satisfies  $\lambda_1(\mathcal{G}) > \frac{1}{2}$ . We present here two examples that prove that this condition cannot be improved.

[Full text](#)

### References

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