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Generalized Hausdorff dimensions of a complex network

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Highlights for “Generalized Hausdorff Dimensions of a Complex Network” by Eric Rosenberg

- We define the Hausdorff dimension, and generalized Hausdorff dimension of order q , of a complex network.
- These dimensions utilize the diameter of each box in a minimal covering of the network.
- Lexicographic ordering is used to select a unique minimal covering for each box size.
- The Hausdorff and box counting dimensions are compared for a perturbed network, and for a growing network.
- The generalized Hausdorff dimensions can be infinite for a range of negative q values.

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