

# How Robust are GNNs to Structural Noise?

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# How Robust are GNNs to Structural Noise?

- Motivation
  - GNNs becoming ubiquitous, but robustness not well-understood
  - Node structural identity—what happens when there's mismatch from structural noise?
  - Can training augmentation with generated noisy samples improve GNN robustness?
- Key findings
  - GNNs can perfectly distinguish structural identity
  - GNN accuracy sharply declines with added structural noise
  - Augmenting training with generated noisy samples can improve GNN robustness