Challenges

- Network geometry is a promising framework, but its applicability relies heavily on our capacity to find high quality embeddings of the original datasets, which is hard.
- ▶ We cannot power our way through this challenge using GPUs or supercomputers: we need to design smarter algorithms.



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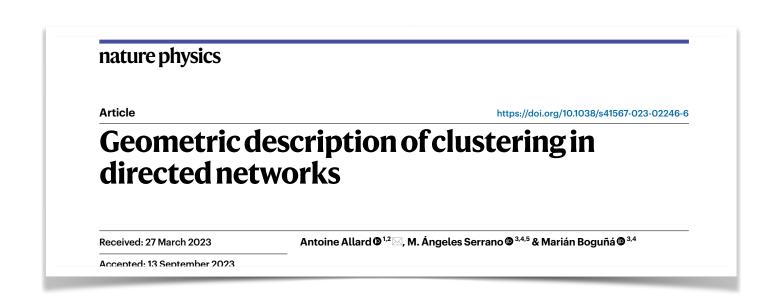
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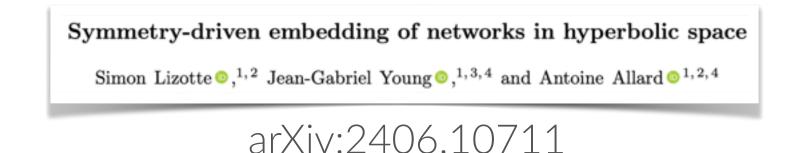


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Hyperbolic Embedding of Directed Networks

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Preprint on arXiv expected early 2025

Outline

- 1. Are simple models enough to study complex systems/networks?
- 2. "Simple" ways to encode structural complexity
 - (a) latent metric space
 - (b) stub types

