

HYPERSCI

1st International Workshop on Theory and Applications of Hypernetwork Science

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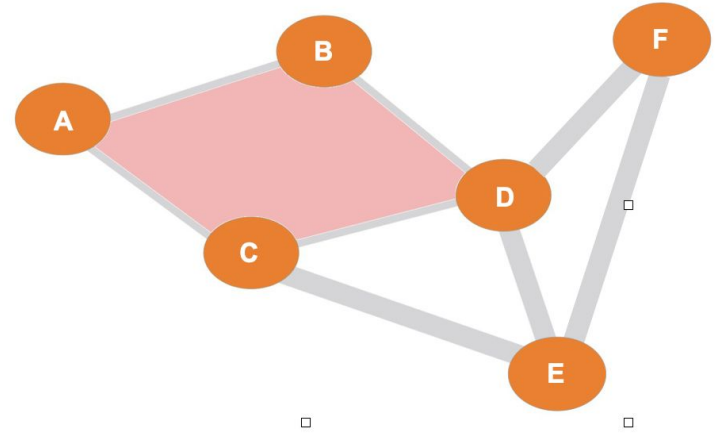
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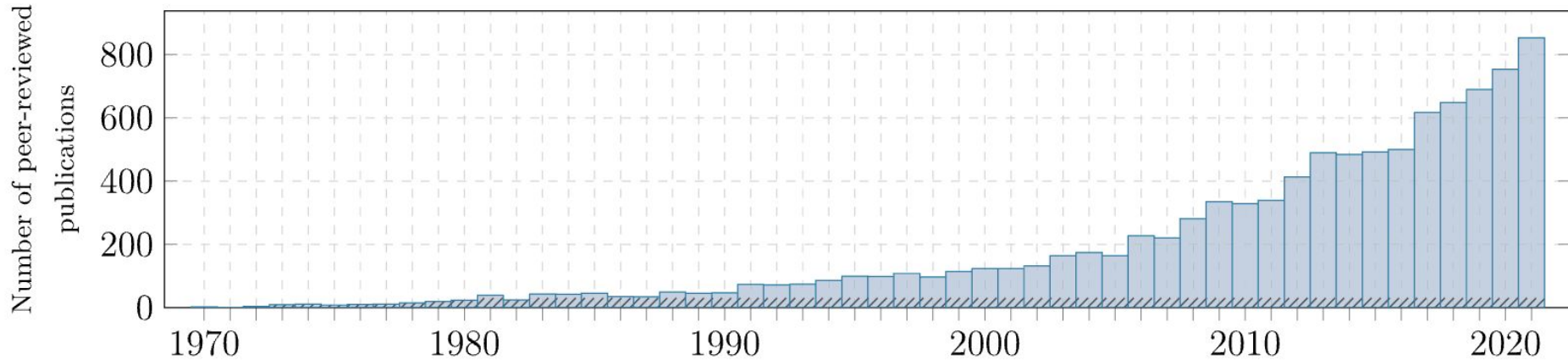
Hypernetwork Science

Hypergraphs

A **generalization of graphs** where edges can connect an **arbitrary number of nodes**



A Hot Research Topic



Data source: SCOPUS

Image source: Antelmi, A., Cordasco, G., Polato, M., Scarano, V., Spagnuolo, C., & Yang, D. (2023). A survey on

Higher-order interactions are ubiquitous!



Type: Online Debate
Nodes: Individuals
Links: Group Discussions



Type: Scientific Collaborations
Nodes: Researchers
Links: Co-Authorships



Type: Actor connectivity
Nodes: Actors
Links: Cast jointly




Type: Mobility
Nodes: Individuals
Links: Co-Location

Workshop Program



10:45	Keynote 1: Encapsulation Structure and Dynamics in Hypergraphs Timothy LaRock
11:40	Presentation 1: Heuristics for the Influence Maximization Problem on Hypergraphs Francesco Cauteruccio
12:05	Presentation 2: Fifty Shapes of Reddit: Do Pro-life Activists Have the Same Interaction Patterns of Gun Fanatics? Daniele De Vinco



16:05	Keynote 2: Applications of Network Backbone Extraction to Infer Information Dissemination Campaigns in Social Media Jussara M. Almeida
17:00	Presentation 3: Coding Hypergraphs Alessia Antelmi & Andrea Failla
17:50	Concluding Remarks Future Research Directions

Thank You!