

AWARDS & ANNOUNCEMENTS

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Evolving Combinatorial Structures

A dominant theme of the research lies in understanding the effect of probabilistic symmetries, especially exchangeability, on the structural properties of evolving large combinatorial objects. Such properties impact important statistical aspects of these processes. The principal objects under consideration are partitions, tree and graphs, which can be used to model real-world structures such as astronomical clusters, phylogenetic trees and social networks. Results of the project could bear on problems in national security, public health, genetics, physics, biology, computer science and statistics