

Session 66 - The DeGroot model on complex networks.

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The DeGroot model is a popular model for opinion formation on directed networks, where at each time-step individuals update their opinions by taking a weighted average of their neighbors' opinions, either synchronously or asynchronously. Provided the matrix of weights is irreducible, the model under synchronous updates is known to converge to the Perron-Frobenius eigenvector times the vector of initial opinions, resulting in consensus. In this talk we study the limiting opinions in the DeGroot model when the underlying network is generated through a random graph model having as a local weak limit a Galton-Watson process (single or multitype) and characterize the limit in terms of an associated weighted branching process.

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