SUPER STAR MODEL: THE GHOST IN THE MACHINE

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The super star model is a variation of the preferential attachment model that allows for one vertex (the super star) to have degree that grows linearly in the network size. Although the model specification is simple, the analysis of the model is subtle and features emerge that make it quite distinct from the plain vanilla preferential attachment model. This talk focuses on the tools that support the analysis of the super star model and many related network models that can be built by surgery on multi-type branching processes.