

## GENERALIZED PERCOLATION IN RANDOM DIRECTED NETWORKS

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We develop a general theory for percolation in directed random networks with arbitrary two point correlations and bidirectional edges, that is, edges pointing in both directions simultaneously. These two ingredients alter the previously known scenario and open new views and perspectives on percolation phenomena. Equations for the percolation threshold and the sizes of the giant components are derived in the most general case. We also present simulation results for a particular example of uncorrelated network with bidirectional edges confirming the theoretical predictions.

[1] M. Boguná and M. A. Serrano, Phys. Rev. **E 72**, 016106 (2005).