

### ***Measuring graph bipartivity - Kate Smith-Miles***

If a graph is bipartite it has many interesting properties and behaviours, but measuring the degree to which a given graph is close to being bipartite can be computationally intractable. A number of metrics have been proposed, and another graph properties could serve as proxy measures as well. This project considers a variety of bipartivity metrics and tests their accuracy on a set of graphs that have been generated to control the degree of bipartivity.

References:

[link.aps.org/doi/10.1103/PhysRevE.68.056107](https://link.aps.org/doi/10.1103/PhysRevE.68.056107)  
[arxiv.org/pdf/cond-mat/0504729](https://arxiv.org/pdf/cond-mat/0504729)

<http://portal.acm.org/citation.cfm?id=1864858>