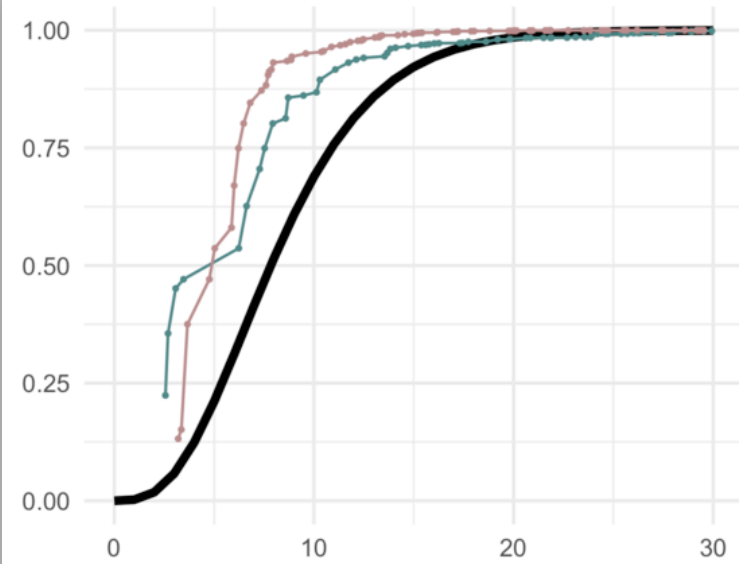
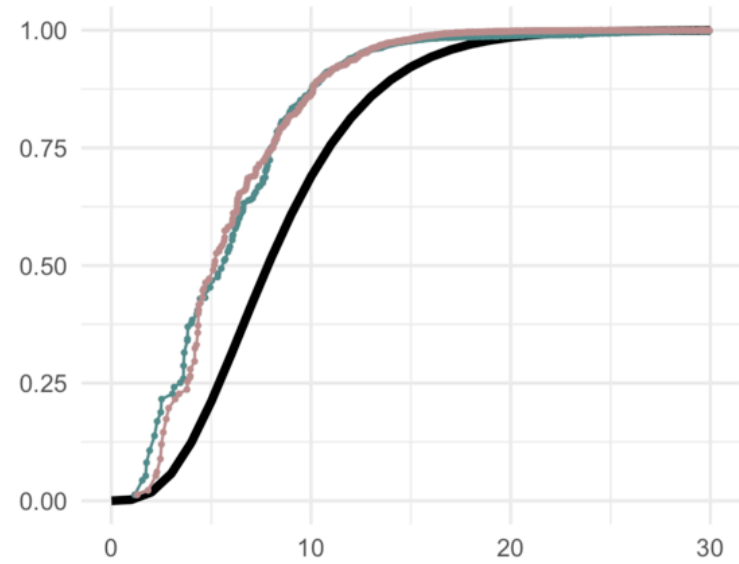


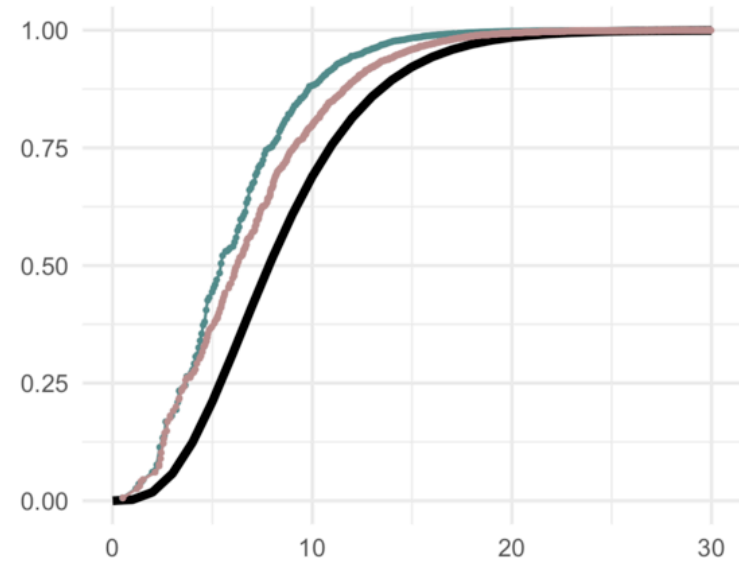
IEAS $\mathbf{d}_0 = \mathbf{d} = (45, 5, 5, 5)$



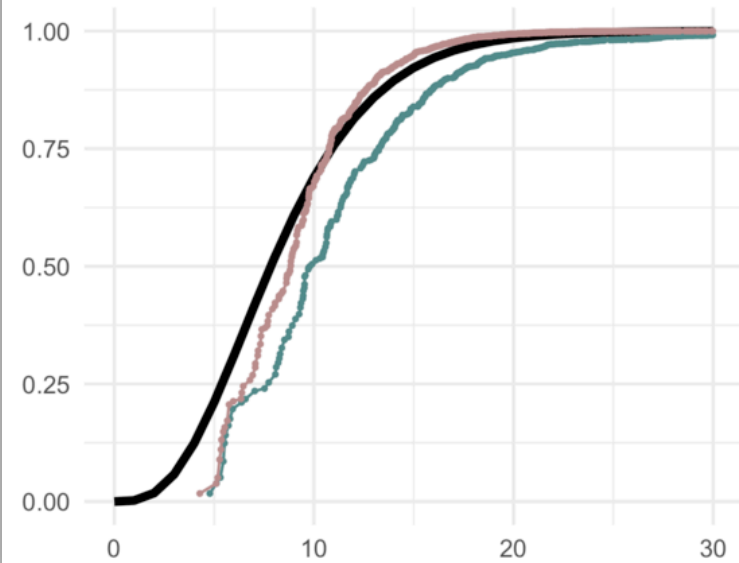
IEAS $\mathbf{d}_0 = \mathbf{d} = (25, 25, 5, 5)$



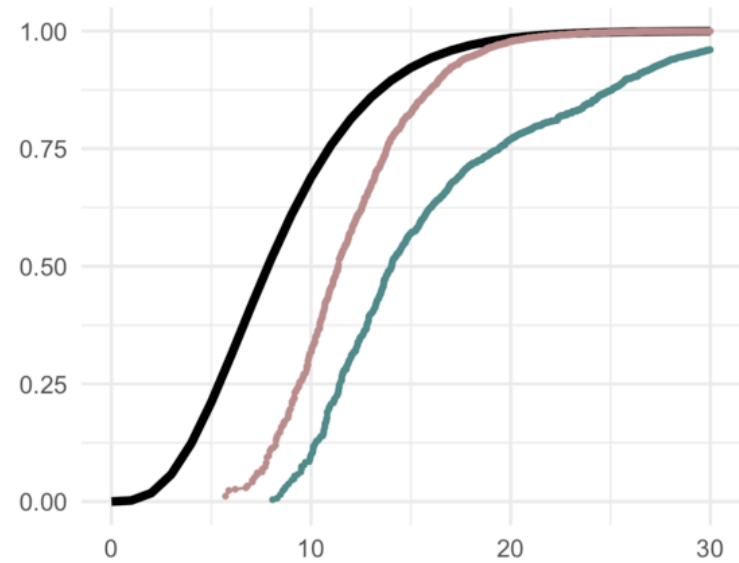
IEAS $\mathbf{d}_0 = \mathbf{d} = (15, 15, 15, 15)$



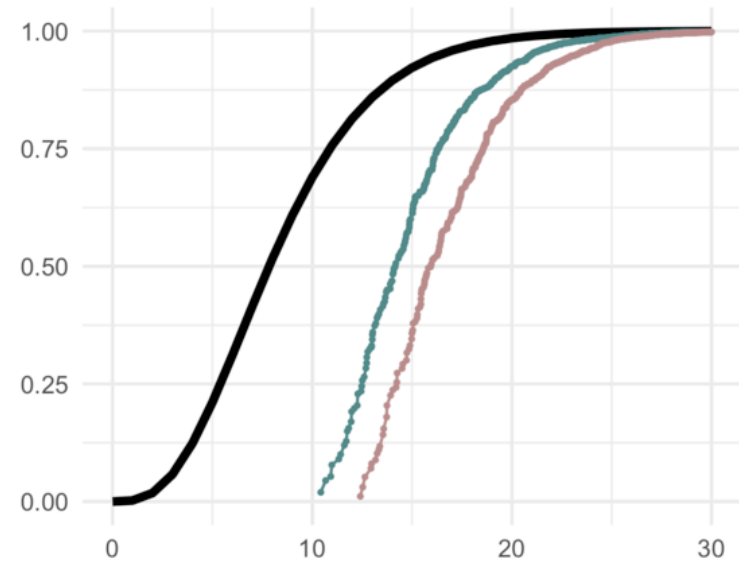
IEAS $\mathbf{d}_0 = (40, 10, 5, 5)$
 $\mathbf{d} = (35, 15, 5, 5)$



IEAS $\mathbf{d}_0 = (35, 10, 10, 5)$
 $\mathbf{d} = (30, 10, 10, 10)$



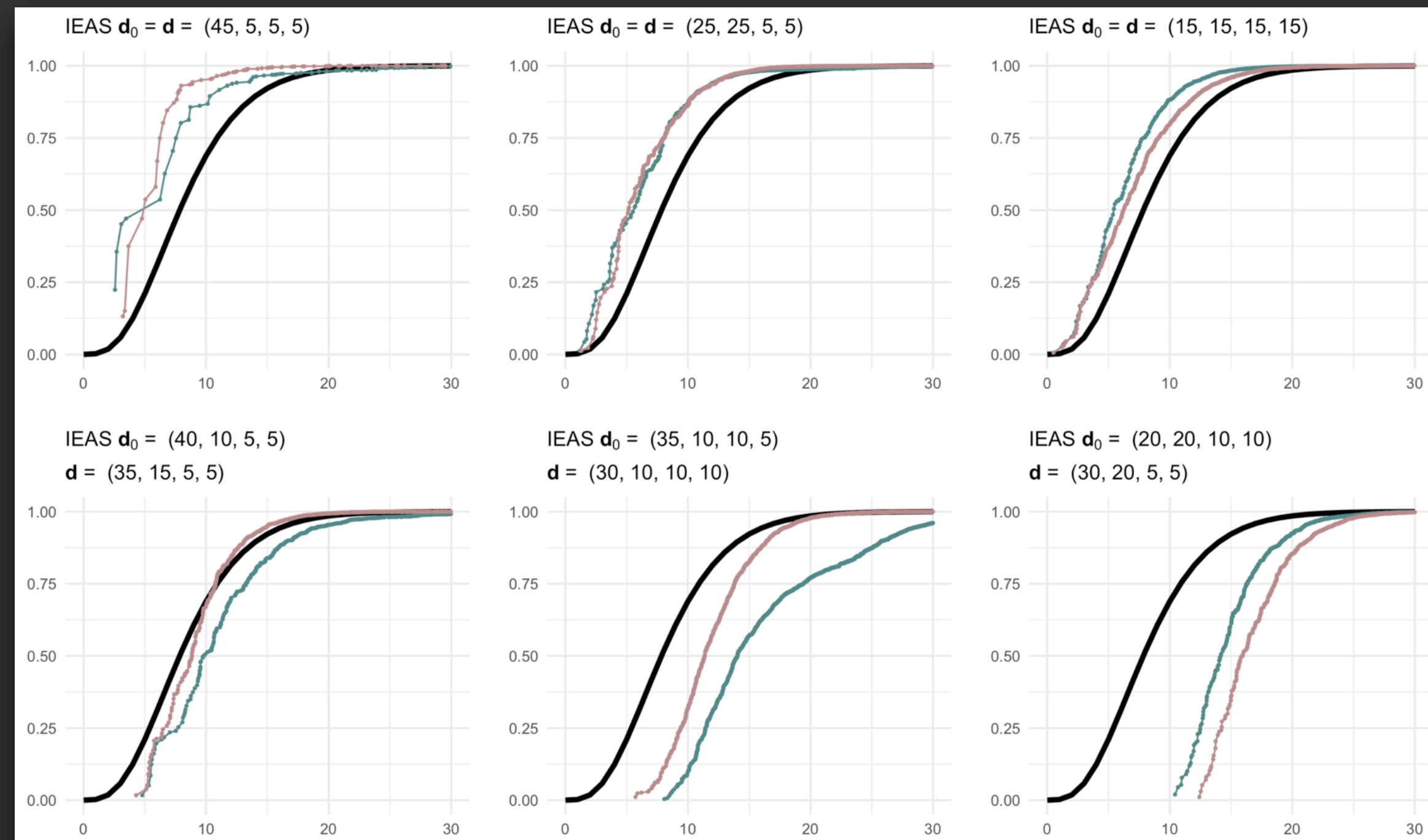
IEAS $\mathbf{d}_0 = (20, 20, 10, 10)$
 $\mathbf{d} = (30, 20, 5, 5)$



- formal goodness of fit tests

multigraph representation of network data

- probability models
- statistics to analyze structural features under these models
- closed expressions for moments of many such statistics
- **formal goodness of fit tests**
 - test statistics S of Pearson and A of information divergence type
 - exact distributions of the test statistics are numerically investigated



even for small number of edges,
the null distributions of both statistics are well
approximated by their asymptotic χ^2 -distribution