Analysis of Networks

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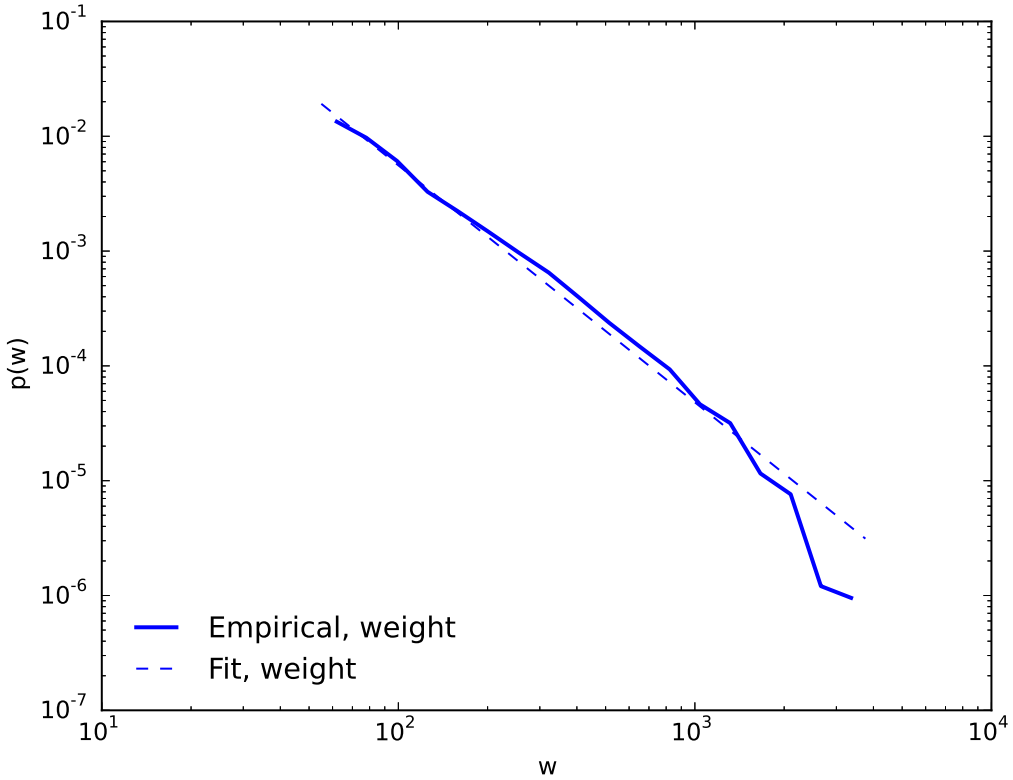
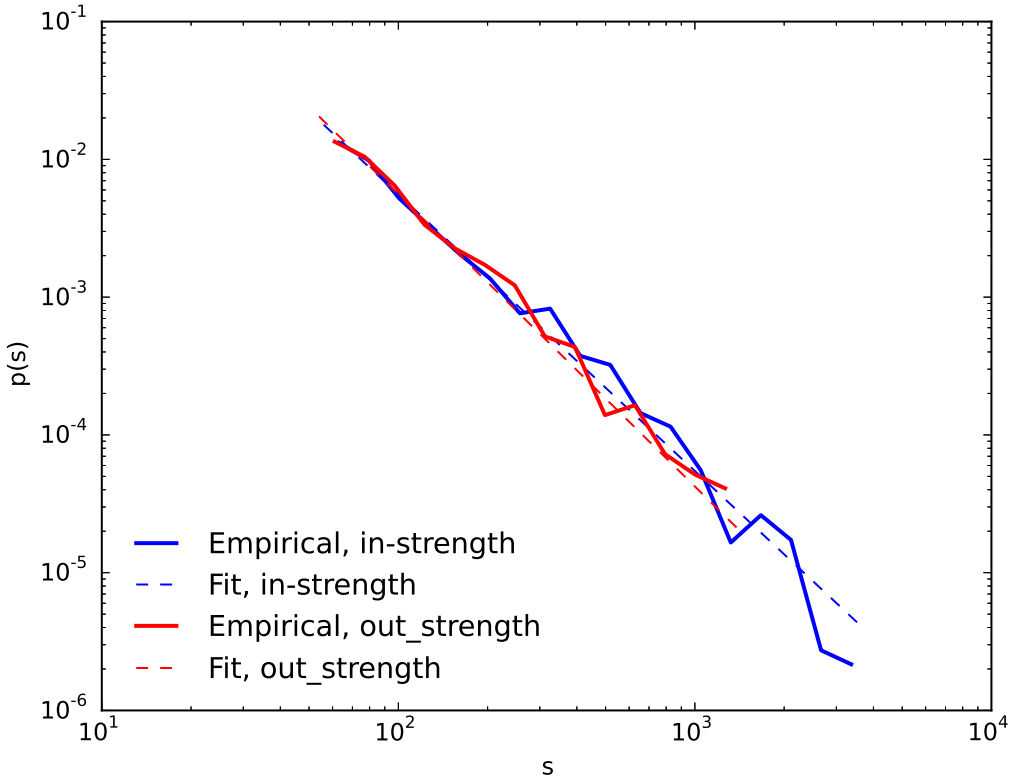
Distribution of Link Weights



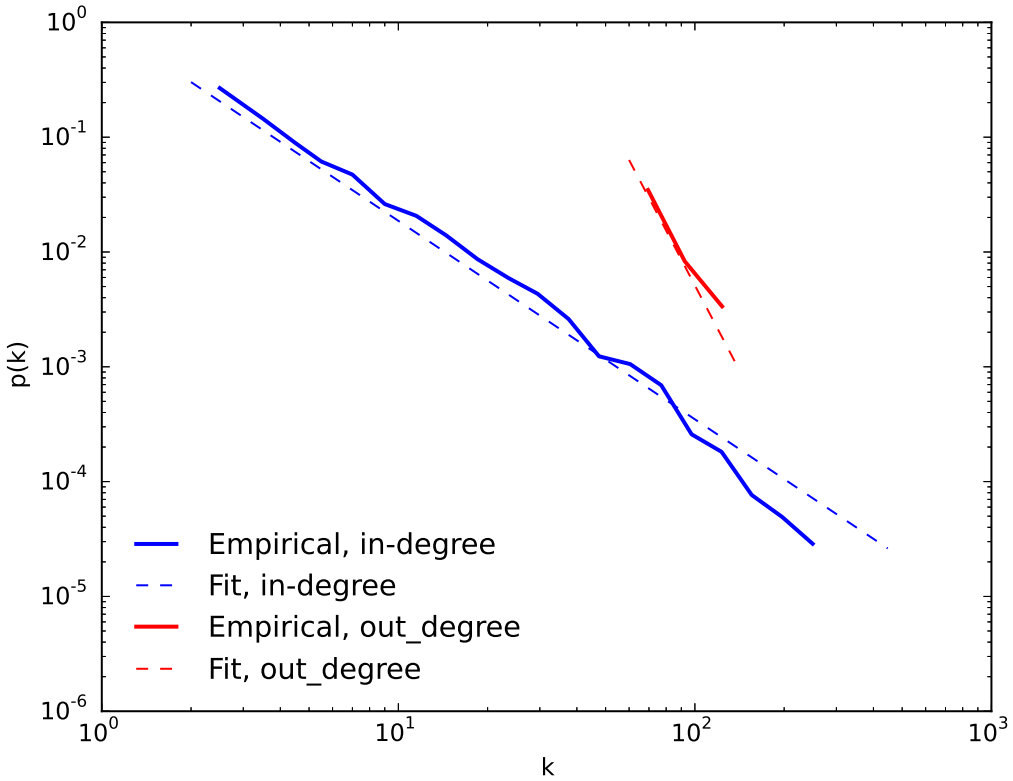
The figure is the probability density function (PDF) of the W matrix, including in-strength and out-strength, where $\alpha = 2.05$ and standard error $\sigma = 0.029$ (The power-law distributions are formulated with: $p(x) \propto x^{-\alpha}$).

Distribution of Strength



The figure is obtained by in/out strength plus one. The PDF of in-strength are fitted by a power-law with $\sigma = 2.01$ and $\sigma = 0.041$. The PDF of out-strength are fitted by a power-law with $\alpha = 2.12$ and $\sigma = 0.041$.

Distribution of Degrees



The figure is obtained by in/out degrees plus one. The probability density function (PDF) of in-degrees are fitted by a power-law with $\sigma = 1.73$ and $\sigma = 0.012$. The PDF of out-degrees are fitted by a power-law with $\alpha = 4.92$ and $\sigma = 0.423$.

The End