CORRECTION

Correction: Modeling the Citation Network by Network Cosmology

The _PLOS ONE_ Staff

Figs 1, 2, 3, 4, 5 and 6 are incorrect. The figures should be formatted as EPS files. The publisher apologizes for the error. The authors have provided a corrected version here.
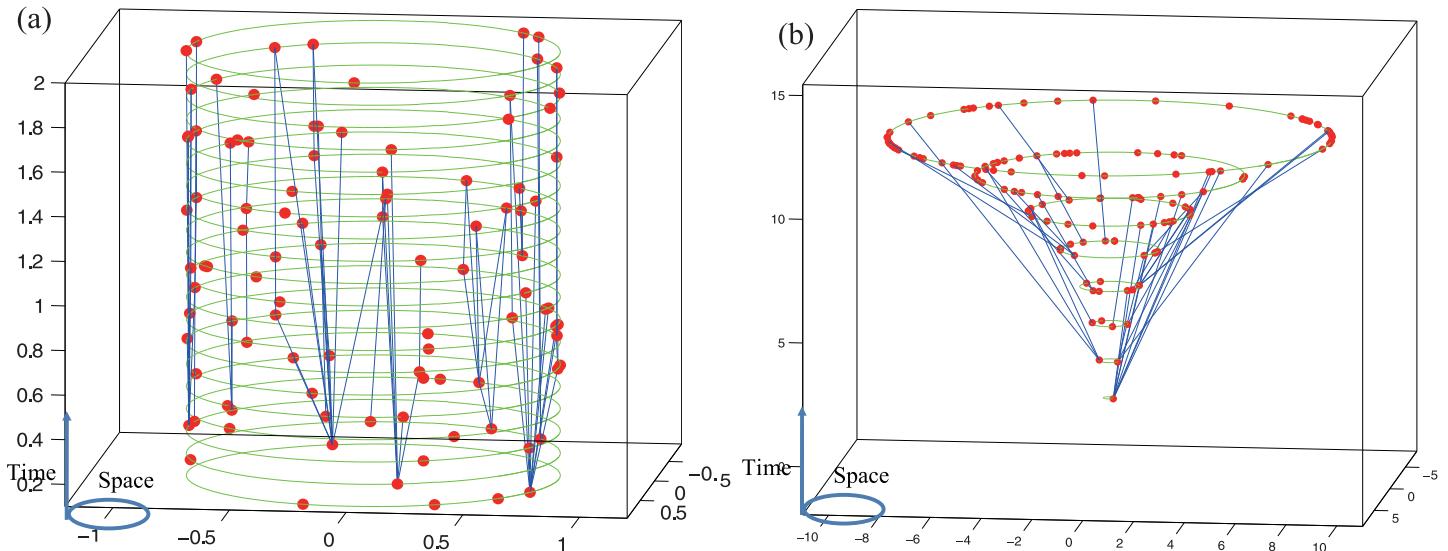
CrossMark
click for updates

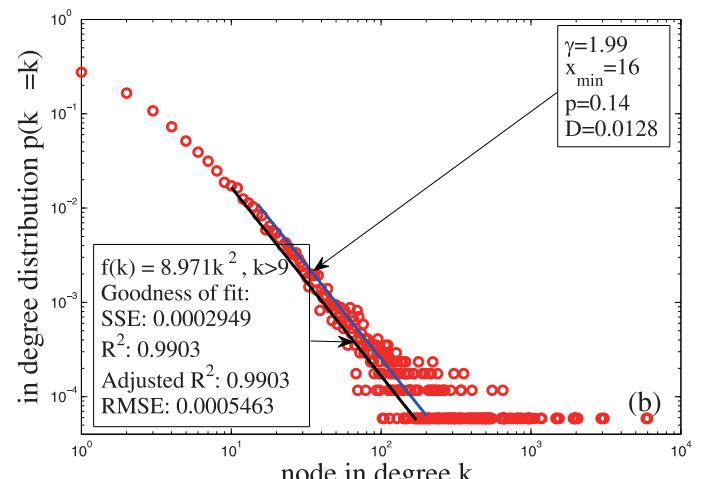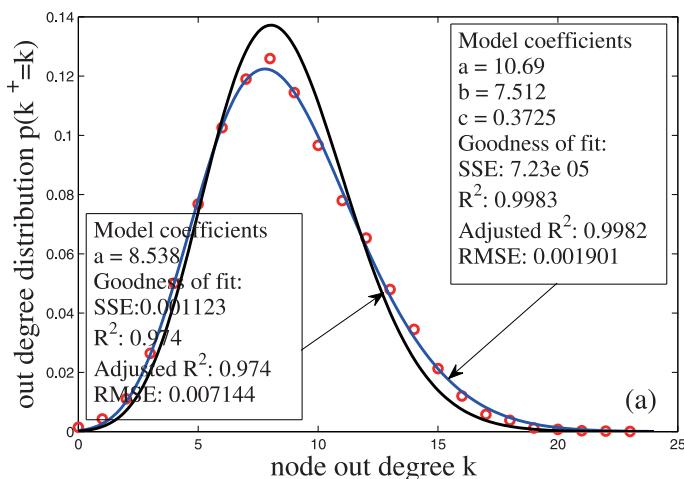**Fig 1. Two networks generated by the CC model.** The functions of the CC model are set to be N(t) = 5, |Di| = 0.2β(θi)ti for the case in Panel(a), and N(t) = [e0.1t], |Di| = 0.15β(θi)[e0.1ti] for the case in Panel(b). β(·) is given by Equation (2) for both cases.

doi:10.1371/journal.pone.0140413.g001
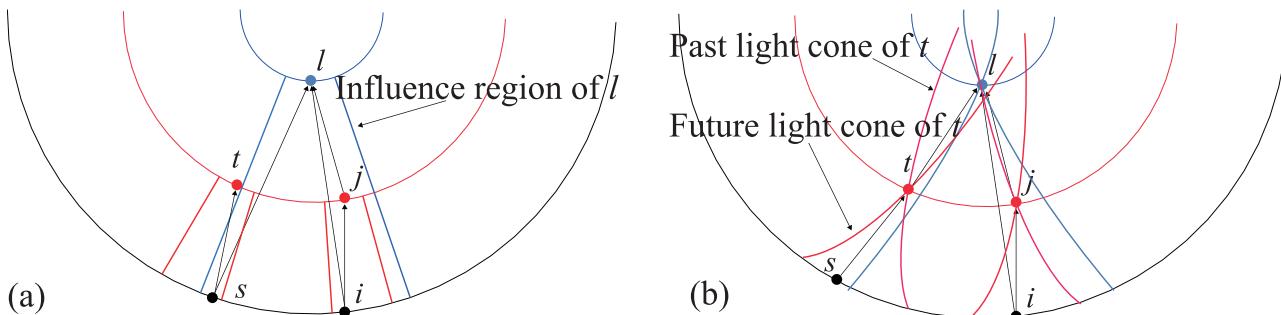
Fig 2. The illustration of the connection mechanisms of the CC model(Panel a) and a causal network on a (1 + 1)-spacetime (Panel b). The influence region of the CC model is the counterpart of the future light cone.
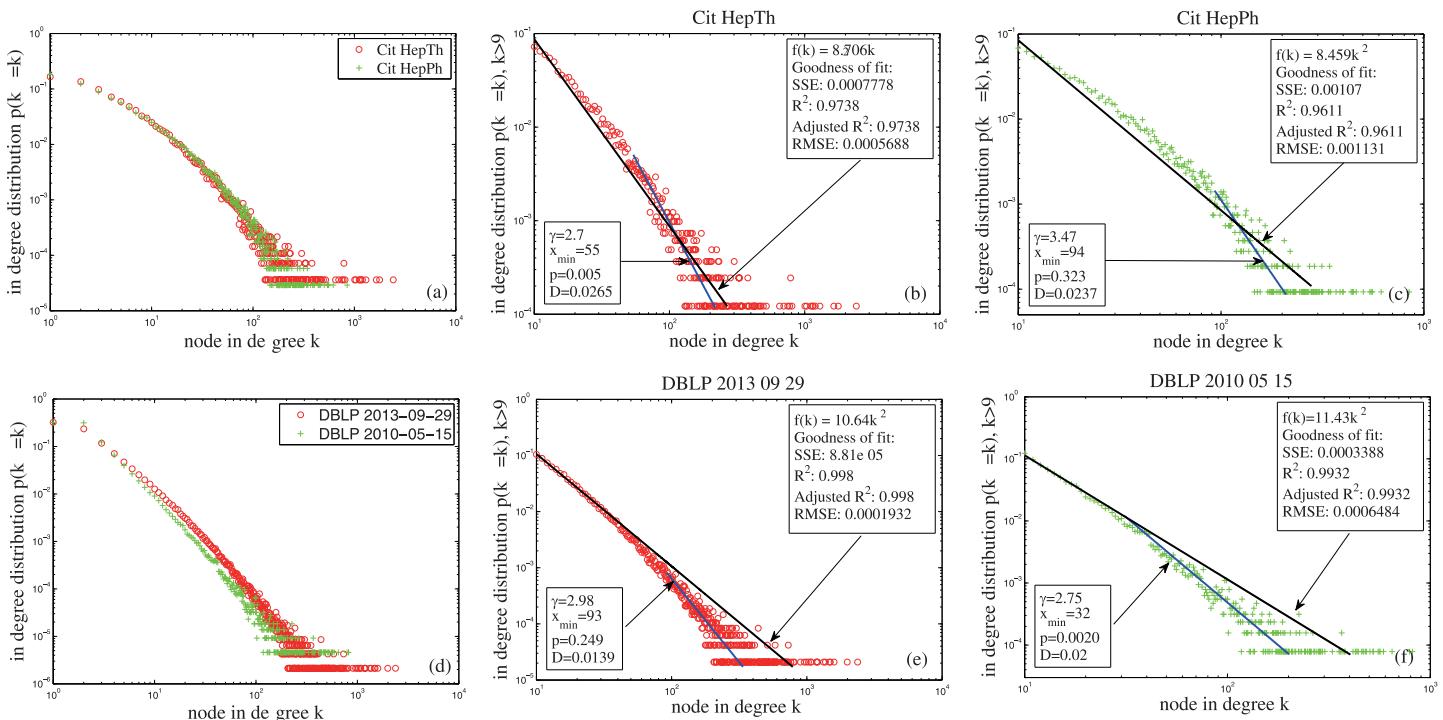
doi:10.1371/journal.pone.0140413.g002

Fig 3. The in- and out-degree distributions of a network generated by the CC model. The functions of the CC model are set as follows: $N(t) = [e^{0.1t}]$, |Di| = 0.15β(θi)[e0.1ti], and $β(·)$ is given by Equation (2). The fitting functions in Panel (a) are the Poisson distribution f(k) = ake−ak! and the mixture Poisson distribution given byEquation (13). The fitting functions in Panel (b) are the power-law functions $f(k) = ak^{-2}$ and f(k) = k–γ∑n = 0∞(n+xmin)–γ.

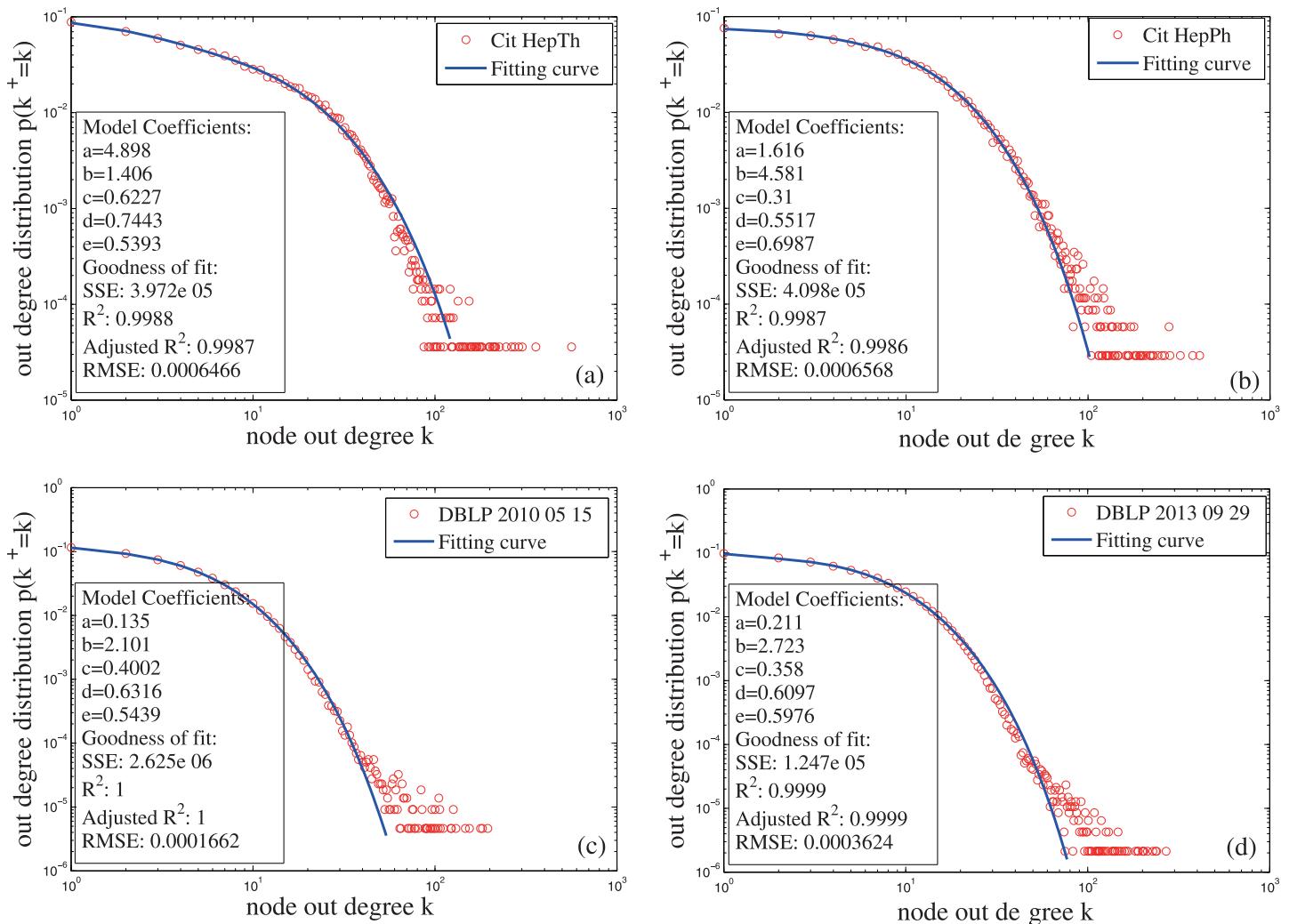doi:10.1371/journal.pone.0140413.g003
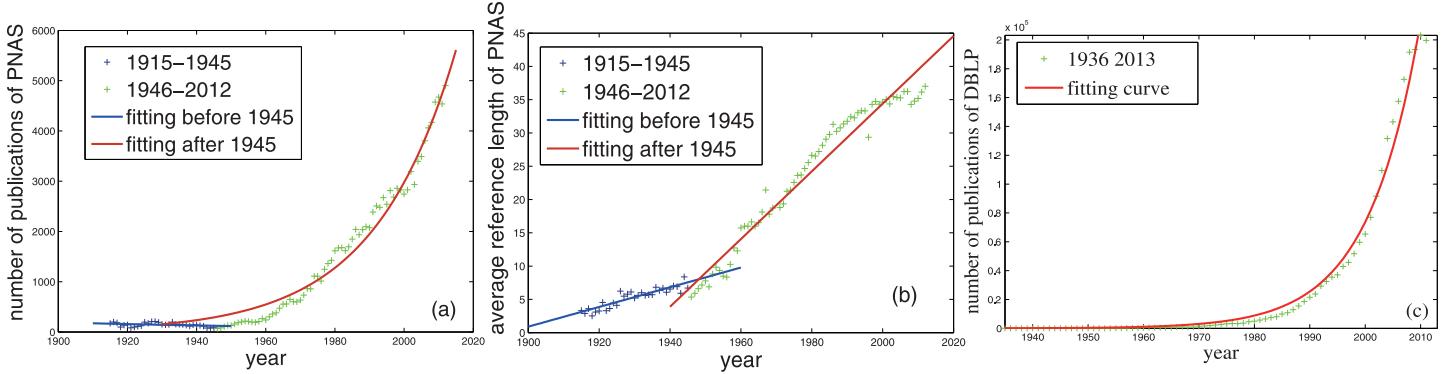
Fig 4. The evolutionary trends of the annual paper number and the annual average reference length of some datasets. The fitting curves for the data between 1946–2012 in Panels(a, b) are $f(t) = 5.397 \times 10^{-34}e^{4.23 \times 10^{-2}t}$ (R^2: 0.974, RMSE: 224.2) and $f(t) = 0.5085t - 982.6$ (R^2: 0.958, RMSE: 2.112) respectively. The fitting curve in Panel(c) is $f(t) = 6.038 \times 10^{-88}e^{0.106t}$($R^2$: 0.9828, RMSE: 7249).

Fig 5. In-degree distributions of the citation networks in Table 1. Panels(b, c, e, f) show the fitting effects of the in-degree distributions of the nodes with in-degree larger than 9 by the power-law functions $f(k) = ak^{-2}$ and $f(k) = k-\gamma\sum_{n=0}^{\infty}(n+x_{min})-\gamma$.

Fig 6. Out-degree distributions of the citation networks in Table 1 and the fitting curves of the distributions. The fitting model is the mixture generalized Poisson distribution (Equation (14)).

doi:10.1371/journal.pone.0140413.g006

Reference

1.   Xie Z, Ouyang Z, Zhang P, Yi D, Kong D (2015) Modeling the Citation Network by Network Cosmology. PLoS ONE 10(3): e0120687. doi:10.1371/journal.pone.0120687 PMID: 25807397