# 國立中央大學

## 統計研究所

### 學術演講

主 講 人:潘建與 博士(中央研究院統計科學研究所)

講 題:A Study of the Influence of Articles in the Large-Scale Citation Network

時 間:108年4月02日(星期二)上午11:00~12:00

地 點:中央大學鴻經館M429室

茶 會: <u>上午 10:30~11:00</u> 地 點: 鴻經館 510 室

#### **ABSTRACT**

Nowadays there are many research metrics at the author-, article-, journal-levels, like the impact factors and many others. However, none of them possess a universally meaningful interpretation on the research influence at all levels, not mentioning that many are subject-biased and consider neighboring relations only. In this work, we introduce a new network-based research metric called the network influence. It considers all information in the whole network and it is universal to all levels. Due to its statistical origin, this metric is computationally efficient and statistically interpretable even if one applies it to a big network data. This work demonstrates the analysis of networks via network influence using a large-scale citation database called the Web of Science. By just considering the articles among statistics community in 1981-2016, the network influence of all articles are calculated and compared, resulting in a top-20 influential articles that are slightly different from the list via impact factors. This metric can be easily extended to author citation network and many similar networks embedded in the Web of Science.

Keywords: Network Influence, Research Metrics, Network Centrality, Web of Science

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