

# 中央研究院統計科學研究所

## 學術演講

講題：Construction Features and Analysis of the Information Warfare Model with Markov Switchings under the Levy Approximation Conditions.

演講人：Prof. Anatolii Nikitin  
The National University of Ostroh Academy

時間：2024-08-12(Mon.) 11:15-12:00

地點：Auditorium, B1F, Institute of Statistical Science ; The tea reception will be held at 10:10.

備註：Lecture in English. Online live streaming through Cisco Webex will be available.

### Abstract

We build and study a continuous evolutionary model describing complex systems' conflicting interaction with non-trivial internal structures. The additional influence of random factors models external conflict interaction. The dynamics of internal conflict are similar to the Lotka-Volterra model. We interpret the new model of information warfare as the impact of rare events that quickly change certain perceptions of a large number of people. As a result, the number of proponents of different ideas makes stochastic leaps, which we can see using the Levy approximation scheme. Such a model is more natural because important news now has a rapid impulse impact on the audience through information channels and social networks.



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