

## Symposium on Complexity Science in Air Transportation

April 10<sup>th</sup> - 12<sup>th</sup>, 2016

Beihang University, Beijing, China

*The growth of air transport brings many challenges to Air Traffic Management systems. One way to address these challenges is to exploit methods from Complexity Science. This symposium brings together 12 leading experts in this area, who will discuss future challenges in six sessions of 90 minutes each:*

- 1) Network Resilience
- 2) Statistical Mechanics
- 3) Network Dynamics
- 4) Network Epidemiology
- 5) Human Factors
- 6) Complexity/Data Science

*Each session is headed by two experts, who present the state of the art in their area for 60 minutes. Afterwards, there is a 30 minute slot for discussion among all experts and the audience. We will publish a special issue in the Chinese Journal of Aeronautics, where each expert contributes an article on his area of expertise.*

Chairs: Xiaoqian Sun, Massimiliano Zanin



**Oriol Lordan**

Universitat Politècnica  
de Catalunya, ES

*Network Resilience*



**Megan Ryerson**

University of  
Pennsylvania, US



**Fabrizio Lillo**

Scuola Normale  
Superiore di Pisa, IT

*Statistical Mechanics*



**Ginestra Bianconi**

Queen Mary University  
of London, UK



**Mark Azzam**

German Aerospace  
Center, DE

*Network Dynamics*



**Xiaoqian Sun**

Beihang University,  
CN



**Li Chen**

Humboldt-University of  
Berlin, DE



**Luis E C Rocha**

University of Namur,  
SE

*Network Epidemiology*



**Andrew Cook**

University of  
Westminster, UK



**Simone Pozzi**

Deep blue,  
IT

*Human Factors*



**Tatsuya Kotegawa**

NASA Ames,  
US



**Massimiliano Zanin**

Innaxis Research Institute  
and Foundation, ES

*Complexity/Data Science*



# *Symposium on Complexity Science in Air Transportation*

## *Tentative Schedule*

*10<sup>th</sup> April, 2016 (Sunday)*

*10:00–17:00 Social Event  
Joined bus trip to the Great Wall,  
UNESCO world heritage*

*18:00–21:00 Welcome Dinner  
Baiyan building*

*11<sup>th</sup> April, 2016 (Monday)*

*09:00–10:30 Session 1  
Network Resilience*

*10:30–11:00 Coffee/Tea break*

*11:00–12:30 Session 2  
Statistical Mechanics*

*12:30–13:30 Lunch break*

*13:30–15:00 Session 3  
Network Dynamics*

*16:00–18:00 Social event  
Beijing Air and Space Museum*

*12<sup>th</sup> April, 2016 (Tuesday)*

*09:00–10:30 Session 4  
Network Epidemiology*

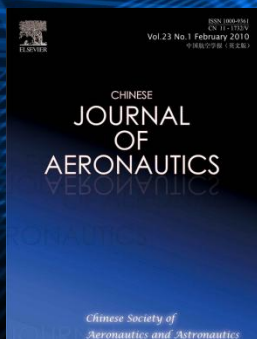
*10:30–11:00 Coffee/Tea break*

*11:00–12:30 Session 5  
Human Factors*

*12:30–13:30 Lunch break*

*13:30–15:00 Session 6  
Complexity/Data Science*

*15:00–16:00 Discussion  
Closing session*



*Special issue of the  
symposium's result*