



Nonlinear Science Working Group
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25th International Symposium on "Disordered Systems: Theory and Its Applications" (DSS-2025)

27-29 November 2025

**Istanbul University Rectorate Building, Mavi Salon (Blue Room)
Beyazıt, İstanbul, Türkiye**

27 November 2025 Thursday	
09:00 - 09:15	Registration
09:15 - 09:30	Welcome and Opening
09:30 - 10:00	<i>"Hidden Transition in Multiplex Networks"</i> Jose Fernando Mendes University of Aveiro, Aveiro, Portugal
10:00- 10:30	<i>"From Gene Teams to Disordered Systems: High-Dimensional Modeling of Gene Variant Networks (CoGNA Approach)"</i> Yelda Tarkan Argüden İstanbul University-Cerrahpasa, İstanbul, Türkiye
10:30 - 10:50	Coffee break and networking
10:50 - 11:20	<i>"Complex Thinking for Inter and Transdisciplinarity: The Complexigraphy Method for Mapping and Choreographing the Complexity of the Thinking on Social Systems"</i> Ana Teixeira de Melo LiLo Institute, Portugal
11:20 - 11:40	<i>"The Epistemic Cartography of Conspiracy Theories"</i> Yağız Alp Tangün Marmara University, İstanbul, Türkiye
11:40 - 12:00	<i>"From "Why" to "What If": Trustworthy Artificial Intelligence"</i> Süreyya Akyüz Bahçeşehir University, İstanbul, Türkiye
12:00 - 12:10	Group photo
12:10	Campus tour and time for lunch
13:30 - 13:50	<i>"Complex Spin Models as an Approach to Explore Demand-side Flexibility in Power Grid Management"</i> Daniel Campos Universitat Autònoma de Barcelona, Barcelona, Spain

13:50-14:10	<i>"Digitalization in the Energy: Sustainable or Self-Defeating?"</i> G.Cigdem Yalcin Istanbul University, İstanbul, Türkiye
14:10-14:25	Coffee break and networking
14:25-14:55	<i>"Thermal Behaviour of Nonlinear Oscillations of Acoustic Cavitation Bubbles"</i> CanFuad Delale MEF University, İstanbul, Türkiye
14:55 - 15:15	<i>"Transport of Active Ornstein-Uhlenbeck Particle in Disordered Environment"</i> Arsha Noushad Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, Karnataka, India
15:15 - 15:30	<i>"Reentrant Localization in a Quasiperiodic Ring with Thue-Morse Sequence"</i> Taylan Yıldız Bilkent University, Ankara, Türkiye
15:30- 15:45	<i>"Competing Orders in a 2D Hard-Core Moiré-Bose–Hubbard Model via Gutzwiller Mean-Field"</i> Süleyman Küçük Bilkent University, Ankara, Türkiye
15:45-16:00	Coffee break and networking
16:00- 16:30	Murray Gell-Mann Memorial Lecture Stefan Thurner Complexity Hub, Vienna, Austria (pending confirmation for online talk)
16:30- 16:45	Wrap-up session

28 November 2025 Friday	
09:00 - 09:30	Registration
09:30 - 10:00	<i>"When Contagions Collide: Mathematics of Interacting Epidemics and Beyond"</i> Fakhteh Ghanbarnejad SRH University of Applied Sciences, Leipzig, Germany
10:00 - 10:20	<i>"Investigation of the Relationship Between Temperature Change and Algal Blooms in Antarctica"</i> Hasan Tatlıpınar Yıldız Technical University, İstanbul, Türkiye
10:20 - 10:40	<i>"Weak Periodic Signal Analysis of Seismic Activity in the Marmara Sea Region"</i> Nazmi Yılmaz Koç University, İstanbul, Türkiye
10:40 - 10:55	Coffee break and networking
10:55 - 11:25	<i>"LEAP: unLocking carEer potentiAl with comPlex systems, data analytics and machine learning"</i> Panos Argyrakis Aristotle University of Thessaloniki, Greece

11:25 - 11:55	<i>“Patterning Research Organisations: From Bridging Gaps to Resolving Forces”</i> Leo Simon Dominic Caves LiLo Institute, Portugal
11:55 - 12:05	Group Photo
12:05	Süleymaniye district visit and time for lunch
13:45 - 14:45	WOMPLEXITY (Women in Complexity Science) Panel Session Moderator: G.Cigdem Yalcin (Physics Department,Istanbul University, Türkiye) Panelists: Fakhteh Ghanbarnejad (Computer Science, SRH University of Applied Sciences, Germany) Ana Teixeira de Melo (Clinical Psychology / LiLo Institute, Portugal) Şenay Kara (Department of English Language and Literature & Centre for Women’s Studies, Istanbul University, Türkiye)
14:45 - 14:50	Announcement: Launching the WOMPLEXITY Network
14:50 - 15:10	Coffee break and networking
15:10 - 15:40	<i>“The Sensitively Unpredictable Human and Chaos in Cinema”</i> Yavuz Turgul Film Director & Screenwriter
15:40 - 16:00	<i>“The Mystery of Thirring Microcosm in the Early Universe”</i> Gediz Akdeniz Nonlinear Science Working Group, Türkiye
16:00 - 16:15	Wrap-up session

29 November 2025 Saturday	
Networking and discussion at the “Complexcity İstanbul Tour” guided by Gediz Akdeniz.	
More details will be given at the wrap-up session .	

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