

# International Conference on Nonlinear Science and Medicine 2025

November 19-21, 2025

**Tetsumon-Clinical Hall**

South Clinical Research Bldg.,  
UTokyo, Hongo, Tokyo, Japan



**REGISTER NOW**



<https://forms.gle/b8icFoZcxTC1VkXp8>

# DAY1

Wednesday, November 19, 2025

**Chair Hideyuki Suzuki**

<b>9:20-9:30</b>	<b>Gen Sobue (Online)</b>	Aichi Medical University
<b>9:30-9:40</b>	<b>Kazuyuki Aihara</b>	The University of Tokyo
		<b>Comprehensive Mathematical Understanding of the Complex Control System between Organs and Challenge for Ultra-Early Precision Medicine</b>
<b>9:40-10:10</b>	<b>Shingo Iwami</b>	Nagoya University
		<b>Mathematical Model-driven and Data-driven Quantitative Data Analysis</b>
<b>10:10-10:40</b>	<b>Naoki Masuda</b>	University of Michigan
		<b>Mathematical Modeling and Data Analysis for Understanding and Intervening into Resilience, Robustness, and Cascading Failures in Inter-organ Networks</b>

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Coffee Break

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<b>10:55-11:25</b>	<b>Kiyoto Kasai</b>	The University of Tokyo
		<b>Research on the Application of Mathematical Analysis Methods to Understand Pathophysiology of Psychiatric Disorders</b>
<b>11:25-11:45</b>	<b>Yukinori Okada</b>	Osaka University
		<b>Integrative Data Analysis based on Statistical Genetics</b>

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Lunch Break

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**Chair Tomoya Takeuchi**

<b>13:00-13:30</b>	<b>Shigeru Saito</b>	University of Toyama
		<b>Research for Pre-Disease Science on the Inter-organ Network as the Complex Control System (I)</b>
<b>13:30-14:00</b>	<b>Shusaku Hayashi</b>	Kyoto Pharmaceutical University
		<b>Research for Pre-Disease Science on the Inter-organ Network as the Complex Control System (II)</b>
<b>14:00-14:30</b>	<b>Jun-ichi Imura</b>	Institute of Science Tokyo
		<b>Development of Observation and Control Theory for the Measurement and Treatment of Inter-organ Networks</b>

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Coffee Break

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**Chair Nina Sviridova**

<b>14:45-15:15</b>	<b>Takahiro Kimura</b>	The Jikei University School of Medicine
		<b>Theoretical Research and Development on Dynamical Network Biomarkers Analysis for Early-Warning Signals of Diseases and Causal Analysis for Interactions between Organs (II)</b>

<b>15:15-15:45</b>	<b>Kai Morino</b>	Kyushu University
<b>Theoretical Research and Development on Dynamical Network Biomarkers Analysis for Early-Warning Signals of Diseases and Causal Analysis for Interactions between Organs (VI)</b>		
<b>15:45-16:15</b>	<b>Yuji Okamoto</b>	Kyoto University
<b>Theoretical Research and Development on Dynamical Network Biomarkers Analysis for Early-Warning Signals of Diseases and Causal Analysis for Interactions between Organs (VII)</b>		

Coffee Break

**Chair Hideyuki Suzuki**

<b>16:30-17:30</b>	<b>Commemorative Ceremony in Honor of Professor Dr. Shun-ichi Amari</b>
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Break

**Chair Yuji Okamoto**

**18:00-20:00 Poster Session with Dinner (Reception + Poster)**

**20:00-20:10 Closing**

## DAY2

**Thursday, November 20, 2025**

**Chair Shingo Iwami**

<b>9:20-9:50</b>	<b>Luonan Chen</b>	The University of Tokyo
<b>Theoretical Research and Development on Dynamical Network Biomarkers Analysis for Early-Warning Signals of Diseases and Causal Analysis for Interactions between Organs (I)</b>		
<b>9:50-10:20</b>	<b>Tomoya Takeuchi</b>	Chiba Institute of Technology
<b>Mathematical Collaborative Research across Moonshot Goal 2 Projects (IV)</b>		

Coffee Break

**Chair Kai Morino**

<b>10:35-11:05</b>	<b>Akinori Awazu</b>	Hiroshima University
<b>Theoretical Research and Development on Dynamical Network Biomarkers Analysis for Early-Warning Signals of Diseases and Causal Analysis for Interactions between Organs (IV)</b>		
<b>11:05-11:35</b>	<b>Hideyuki Suzuki</b>	Osaka University
<b>Mathematical Collaborative Research across Moonshot Goal 2 Projects (I)</b>		
<b>11:35-12:05</b>	<b>Yasuaki Hiraoka</b>	Kyoto University
<b>Mathematical Collaborative Research across Moonshot Goal 2 Projects (VI)</b>		

Lunch Break

**Chair Koji Noshita**

**13:20-13:50 Katsuhito Fujiu** The University of Tokyo  
**Theoretical Research and Development on Dynamical Network Biomarkers Analysis for Early-Warning Signals of Diseases and Causal Analysis for Interactions between Organs (IV)**

**13:50-14:20 Gohei Tanaka** Nagoya Institute of Technology  
**Mathematical Collaborative Research across Moonshot Goal 2 Projects (II)**

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Coffee Break

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**14:35-15:05 Nina Sviridova** Tokyo City University  
**Mathematical Collaborative Research across Moonshot Goal 2 Projects (V)**

**15:05-15:35 Tetsuo Minamino** Kagawa University  
**Theoretical Research and Development on Dynamical Network Biomarkers Analysis for Early-Warning Signals of Diseases and Causal Analysis for Interactions between Organs (III)**

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Coffee Break

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**Chair Keita Iida**

**15:50-16:20 Yoshinori Tamada** Hirosaki University  
**Mathematical Collaborative Research across Moonshot Goal 2 Projects (VII)**

**16:20-17:00 Kantaro Fujiwara** The University of Tokyo  
**Comprehensive Database Construction for Medical and Mathematical Collaborative Research (I)**

**Kazutsuna Yamaji** National Institute of Informatics  
**Comprehensive Database Construction for Medical and Mathematical Collaborative Research (IV)**

**17:00-17:30 Takanori Fujita** Keio University  
**ELSI Initiative in Mathematical Collaborative Research and Comprehensive Database Construction across Moonshot Goal 2 Projects**

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Break

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**18:30-21:00 IZAKAYA Party**

# DAY3

Friday, November 21, 2025

**Chair Gouhei Tanaka**

**9:30-10:00 Shizuo Kaji** Kyoto University  
Mathematical Collaborative Research across Moonshot Goal 2 Projects (III)

**10:00-10:30 Koji Noshita** Kyushu University  
Comprehensive Database Construction for Medical and Mathematical Collaborative Research (III)

**10:30-11:00 Keita Iida** Osaka University  
Comprehensive Database Construction for Medical and Mathematical Collaborative Research (II)

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Coffee Break

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**Chair Kantaro Fujiwara**

**11:15-12:15 Board Meeting**

**12:15-12:25 Closing**

**12:25-17:00 Free Discussion (optional)**



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