



HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF MATHEMATICS AND INFORMATICS



International Conference on
Applied Mathematics and Informatics 2026
(AMI 2026)

Plenary talks

📍 10th Floor Auditorium, Ta Quang Buu Library

Session 1 > 👤 Doan Thai Son

08:30–09:30

Ho Tu Bao

Systems thinking in the age of AI: Reflections on autonomous-intelligent systems

09:30–10:30

Dinh Nho Hao

Parameter estimation in surface water and groundwater quality modeling

Session 2 > 👤 Phan Thi Ha Duong

11:00–12:00

Dao Hai Long

Some recent interactions between research mathematics and artificial intelligence



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Minisymposium

Analysis

Session 3 >  **Le Van Tu** >  **C7-105**

14:00–14:30

Doan Thai Son

Spectral theory of nonautonomous dynamical systems and applications

14:30–15:00

Pham Hoang Hiep

Singular invariants of plurisubharmonic functions and complex spaces

15:00–15:30

Nguyen Thi Van Anh

Approximation of Allen-Cahn equations with signed-functional initial conditions to a mean curvature flow

Session 4 >  **Dao Tuan Anh** >  **C7-105**

15:45–16:15

Nguyen Van Hoang

The L^2 -Caffarelli-Kohn-Nirenberg inequalities: The sharp constants and stability estimate

16:15–16:45

Duong Anh Tuan

Non-existence results for fractional elliptic inequalities on lattice graphs



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Algebra, Number theory and Combinatorics

Session 3 > **Nguyen Duy Tan** > **C7-107**

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|--------------------|--|
| 14:00–14:30 | <u>Ngo Dac Tuan</u>, Nguyen Chu Gia Vuong, and
Pham Lan Huong
<i>On the algebra of multiple zeta values</i> |
| 14:30–15:00 | <u>Nguyen Duc Manh</u>
<i>Counting representations of real quadratic orders
and modular forms</i> |
| 15:00–15:30 | <u>Nguyen Hong Duc</u> and <u>Le Quy Thuong</u>
<i>Equivariant motivic integration for formal schemes
and the motivic Milnor fiber of formal functions</i> |

Session 4 > **Nguyen Cong Minh** > **C7-107**

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|--------------------|--|
| 15:45–16:15 | <u>Phan Thi Ha Duong</u>
<i>Some deterministic and stochastic dynamical
systems on graphs: A random walk perspective</i> |
| 16:15–16:45 | <u>Trieu Thu Ha</u>
<i>The many roles of Mahler measure</i> |



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Probability, Statistics and Applications

Session 3 > [Tran Ngoc Khue](#) > [C7-108](#)

14:00–14:30

Ngo Hoang Long

Recent advances in numerical approximation of stochastic differential equations with irregular coefficients

14:30–15:00

Can Van Hao and Remco van der Hofstad

Random cluster model on random graphs

15:00–15:30

Nguyen Tien Dung

Berry-Esseen bounds for the parameter estimations in SDEs

Session 4 > [Ngo Hoang Long](#) > [C7-108](#)

15:45–16:15

**Camille Mondon, Trinh Thi Huong,
Josep Antoni Martin Fernandez, and
Christine Thomas-Agnan**

Analysis of variance for density data

16:15–16:45

Tran Ngoc Khue

Malliavin calculus for local asymptotic properties of stochastic differential equations with and without jumps



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Optimization and Scientific Computing

Session 3 >  **Do Duc Thuan** >  **C7-103**

14:00–15:00

Pham Ky Anh

Regularized dynamical system methods for ill-posed problems

15:00–15:30

Tang Quoc Bao

Indirect diffusion effect in reaction-diffusion systems

Session 4 >  **Pham Thi Hoai** >  **C7-103**

15:45–16:15

Dao Phuong Nam

Q-Learning trajectory tracking control for a perturbed Three-Wheeled mobile robot with mecanum wheels

16:15–16:45

Nguyen Pham Duy Thai, Chu Thi Mai Hong, and Kim-Chuan Toh

Time-integrated optimal transport: A robust minimax framework



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Data Science

Session 3 >  **Ha Minh Hoang** >  **C7-109**

14:00–14:30

Nguyen Van Hau

From offline metric to instructional decision: calibration, leakage, and effect size in educational data

14:30–15:00

Nguyen Tuan Binh

When AI “makes things up”: Understanding how large language models work and the challenge of controlling AI hallucinations

15:00–15:30

Nguyen Thi Trang Nhung

Some development directions of applied mathematics in healthcare

Session 4 >  **Nguyen Van Hau** >  **C7-109**

15:45–16:15

Ha Minh Hoang

Recent advances in optimization for drone delivery scheduling

16:15–16:45

Nguyen Thi Ngoc Anh

Fisher-geometric drift statistics for cost-aware adaptive forecasting under distribution shift