2025 年完全非线性偏微分方程国际研讨会

2025 International Workshop on Fully Nonlinear Partial Differential Equations

Conference Handbook

2025 年 6 月 16 日至 20 日

June 16-20, 2025

Shanghai·China

Hosted by: Shanghai Institute for Mathematics and Interdisciplinary Sciences
School of Mathematical Sciences, Fudan University
Shing-Tung Yau Center , Southeast University

Organized by: Shanghai Institute for Mathematics and Interdisciplinary Sciences

Content

Conference Announcement

2025 International Workshop on Fully Nonlinear Partial Differential Equations

To promote academic exchange in the field of fully nonlinear partial differential equations, Shanghai Institute for Mathematics and Interdisciplinary Sciences (SIMIS), School of Mathematics, Fudan University and Shing-Tung Yau Center, Southeast University will jointly host the 2025 International Workshop on Fully Nonlinear Partial Differential Equations from June 16 to June 20, 2025.

This workshop has invited experts and scholars from China, the United States, Australia, Japan, and other countries to participate in a hybrid (online and offline) format, sharing and discussing the latest academic achievements in the field of fully nonlinear partial differential equations.

Conference Details：

I. Conference Dates & Venue

Dates: June 16–20, 2025 (5-day duration, including registration and departure).

Registration Location: Atour Hotel Shanghai Wujiaochang Wanda Plazz
(Address: No. 133, Guotong Road, Yangpu District, Shanghai)

Conference Venue: Shanghai Institute for Mathematics and Interdisciplinary Sciences (SIMIS)(Address: Building A, Chuangzhi International Plaza, No. 657 Songhu Road, Yangpu District, Shanghai)

Zoom ID: 652 217 0941, Passcode: c58PMv

Zoom website address: https://us06web.zoom.us/j/6522170941?pwd=5gK3sn7Gb6to2dJL0emw48pV7aplZo.1&omn=84628810664

II. Agenda & Schedule

June 16 (Monday)	Afternoon: Registration at Atour Hotel Shanghai Wujiaochang Wanda Plazz.
June 17 (Tuesday)	Morning: Academic presentations & Group photo; Afternoon: Academic presentations.
June 18 (Wednesday)	Full-day academic presentations.
June 19 (Thursday)	Full-day academic presentations.
June 20 (Friday)	Morning: Have discussions in groups; Afternoon: Leave for the return journey.

III. Additional Information

1. The seminar is invited by the organizer and no conference fee is charged. Domestic scholars are responsible for their own transportation and accommodation expenses.

2. Organizers:

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Shanghai Institute for Mathematics and Interdisciplinary Sciences
School of Mathematical Sciences, Fudan University
Shing-Tung Yau Center, Southeast University
April 29th , 2025

Conference Program

June 17 (Tuesday), Morning				
08:30-08:40	Moderator:Hongjie Dong, Openning Coromony speaker: Shing-Tung Yau			
18th floor, SIMIS Meeting ID: 652 217 0941, Passcode: c58PMv				
Time	Speaker	Affiliation	Title	Moderator
08:40-09:30	Xu-Jia Wang	Westlake University	Regularity of the Monge-Ampère equation	Jiaxing Hong
09:30-10:00	Group photo & Tea break			
10:00-10:50	Xiaohua Zhu	Peking University	Blow-down solutions of steady Ricci solitons	Xiaoping Yang
10:50-11:40 (UCT-8: 6.16 21:50-22:40)	Micah Warren	University of Oregon	Quantitative stability of the regularity property of optimal transport near the smooth measures on compact manifolds	Xiaoping Yang
Lunch Time (4th floor, SIMIS)				
June 17 (Tuesday), Afternoon				
Time	Speaker	Affiliation	Title	Moderator
14:00-14:50	Huichun Zhang	Sun Yat-sen University	Optimal boundary gradient estimates for harmonic maps from RCD spaces	Qirui Li
14:50-15:40	Shuhei Kitano	Waseda University	Calderón—Zygmund estimates for fully nonlinear second order and nonlocal equations	Qirui Li
15:40-16:00	Tea break			
16:00-16:50	Dongsheng Li	Xian Jiao Tong University	Liouville Type Theorems for Fully Nonlinear Elliptic Equations	Huaiyu Jian
Banquet				

June 18 (Wednesday), Morning				
18th floor, SIMIS **Meeting ID: 652 217 0941, Passcode: c58PMv**				
Time	Speaker	Affiliation	Title	Moderator
08:40-09:30 (UCT-3: 6.17 21:40-22:40)	Guozhen Lu	University of Connecticut	Sharp geometric and functional inequalities: Best constants, extremizers and stability	Hongjie Dong
09:30-10:00	茶歇			
10:00-10:50 (UCT-5: 6.17 21:00-21:40)	Nicolai V. Krylov	University of Minnesota	Essentials of Real Analysis and Morrey-Sobolev spaces for second-order elliptic and parabolic PDEs with singular first-order coefficients	Hongjie Dong
10:50-11:40	Chao Xia	Xiamen University	ABP method to Log-Sobolev inequality	Shibing Chen
Lunch Time (4th floor, SIMIS)				
June 18 (Wednesday), Afternoon				
Time	Speaker	Affiliation	Title	Moderator
14:00-14:50	Xi-Nan Ma	University of Science and Technology of China	Best constant and extremal function for a class Hardy-Mazya-Sobolev inequality	Chong Song
14:50-15:40	Ting-Jung Kuo	Taiwan Normal University	Spherical metric with evenly distributed conical singularities on flat tori	Feida Jiang
15:40-16:00	Tea break			
16:00-16:50	Lu Xu	Hunan University	Some new results on constant rank theorem	Feida Jiang
16:50-17:40	Fang Wang	Shanghai Jiao Tong University	Rigidity of poincare-einstein manifolds with flat euclidean conformal infinity	Weiming Shen
Banquet				

June 19 (Thursday), Morning				
18th floor, SIMIS **Meeting ID: 652 217 0941, Passcode: c58PMv**				
Time	Speaker	Affiliation	Title	Moderator
08:40-09:30	Mikhail Safonov	University of Minnesota	On elliptic type Harnack inequalities for second order parabolic equations	Hongjie Dong
09:30-10:00	Tea break			
10:00-10:50	Yu Yuan	University of Washington	Constant rank theorem for special Lagrangian and quadratic Hessian equations	Yi Li
10:50-11:40	Guohuan Qiu	Chinese Academy of Sciences	Very weak solutions of the Dirichlet problem for 2-Hessian equation	Ge Xiong
Lunch Time (4th floor, SIMIS)				
June 19 (Thursday), Afternoon				
Time	Speaker	Affiliation	Title	Moderator
14:00-14:50	Bo Guan	The Ohio State University	Second order estimates under weaker concavity conditions for fully nonlinear elliptic equations	Huyuan Chen
14:50-15:40	Jiakun Liu	The University of Sydney	Global $C^{1,\alpha}$ regularity for Monge-Ampère equations	Genggeng Huang
15:40-16:00	Tea break			
16:00-16:50	Shuangjian Zhang	Fudan University	Monopolist's profit-maximization v.s. screening problems: a PDE point of view	Zhizhang Wang
16:50-17:40	Zongyuan Li	City University of Hong Kong	Some Liouville-type theorems on half spaces	Zhizhang Wang
Dinner Time (4th floor, SIMIS)				

June 20 (Friday), Morning
Have discussions in groups
June 20 (Friday), Afternoon
Leave for the return journey

Report Title and Abstract

Second order estimates under weaker concavity conditions for fully nonlinear elliptic equations

Bo Guan Ohio State University

Abstract: We are concerned with solving fully nonlinear equations, both for the Dirichlet problem and for equations on closed manifolds. We shall discuss the roles of subsolutions and concavity in the study of fully nonlinear PDEs, and consider deriving a priori estimates under weaker concavity conditions.

Spherical metric with evenly distributed conical singularities on flat tori

Ting-Jung Kuo National Taiwan Normal University

Abstract: In this talk, I will discuss the following curvature equation on a flat torus E_τ :

$$\Delta u + e^u = 8\pi n\delta_0 + 4\pi(\delta_p + \delta_{-p}) \quad \text{on } E_\tau, \quad \tau \in \cup \tag{1.1}$$

where $n \in \mathbb{Z}$ and $p \in E_\tau$. This equation (1.1) originally arose from conformal geometry. Since the total curvature here is $8\pi(n+1) \in 8\pi\mathbb{N}$, an important fact of equation (1.1) is that any solution can generate one-parameter family of bubbling solutions. Given the singularities that are evenly distributed, two natural questions arise: looking for so called the even (resp. noneven) family of blow-up solutions. Define

$$\Lambda^{(n)}_{\text{even}} = \{(\tau, p)| \text{ eq(1) has even family of solutions}\}$$

and

$$\Lambda^{(n)}_{\text{noneven}} = \{(\tau, p)| \text{ eq(1) has noneven family of solutions}\}$$

In this talk, I will give a description for these two sets from the perspective of integrable systems. In particular, the method of isomonodromic deformation plays a central role, allowing us to establish a relationship between the curvature equation with a single singularity:

$$\Delta u + e^u = 8\pi m\delta_0, \quad m \in \{n-1, n, n+1\}.$$

Calderón—Zygmund estimates for fully nonlinear second order and nonlocal equations

Shuhei Kitano Waseda University

Abstract: In this talk, I will present recent developments on Calderó-Zygmund estimates for both fully nonlinear second order and nonlocal equations. In the first part, I will discuss Calderón-Zygmund-type estimates for fully nonlinear nonlocal equations, analogous to the classical result by Caffarelli for second order equations. In the second part, I will focus on a joint work with Hongjie Dong, where we establish Calderón–Zygmund estimates with exponent $p = 1$ for fully nonlinear second order equations.

Essentials of Real Analysis and Morrey-Sobolev spaces for second-order elliptic and parabolic PDEs with singular first-order coefficients

Nicolai V. Krylov University of Minnesota

Abstract: In recent years we witness growing interest in using Real Analysis methods and results in the theory of nondivergence form partial differential equations (PDEs) and the goal of this lecture is to give a brief account of several results in Real Analysis used in the theory of elliptic and parabolic equations in Sobolev and Morrey-Sobolev spaces. In particular, we concentrate on Hardy-Littlewood maximal function theorem, Fefferman-Stein theorem, Adams theorem, theory of Muckenhoupt weights, Rubio de Francia extrapolation theorem, and Dong-Kim mixed-norm theorem and their role in Sobolev or Morrey-Sobolev space theory of parabolic equations with mixed norms.

Liouville Type Theorems for Fully Nonlinear Elliptic Equations

Dongsheng Li Xian Jiao Tong University

Abstract: In this talk, we will establish several Liouville type theorems for general fully nonlinear elliptic equations, where the domains are the whole spaces or half spaces and the righthand sides may contain periodic data. We will use our general theorems to some concrete equations including Monge-Ampère equations, Special Lagrange equations, etc.

Some Liouville-type theorems on half spaces

Zongyuan Li City University of Hong Kong

Abstract: In this talk, I will present two Liouville-type theorems for conformally invariant fully nonlinear elliptic equations on half spaces. The first concerns a broad class of fully nonlinear elliptic PDEs with nonlinear Robin-type boundary conditions, where we identify sharp conditions under which Liouville theorems hold. The second involves σ_k-type equations with nonlinear boundary conditions depending on second-order derivatives, arising naturally from variational problems in conformal geometry. A central aspect of both results in the treatment of isolated singularities on the boundary. Based on joint works with Baozhi Chu and Yanyan Li from Rutgers.

Global $C^{1,\alpha}$ regularity for Monge-Ampère equations

Jiakun Liu University of Sydney

Abstract: Abstract: In this talk, we will discuss the global Hölder gradient estimate for solutions to the Dirichlet problem of the Monge-Ampère equation on strictly convex but not uniformly convex domains. This is a recent joint work with Qing Han and Yang Zhou.

Sharp geometric and functional inequalities: Best constants, extremizers and stability

Guozhen Lu University of Connecticut

Abstract: In this talk, we will report some recent works on sharp geometric and functional inequalities. These include the stability for the Hardy-Littlewood-Sobolev inequality and the higher and fractional order Sobolev inequalities and their asymptotically sharp lower bounds in the stability inequalities. If time permits, I will also discuss the stability of sharp Caffarelli-Kohn-Nirenberg inequalities, the Heisenberg uncertainty principle, the Poincare inequalities with Gaussian measures, and stability of geometric inequalities on hyperbolic spaces, etc. These are joint works with C. Cazacu, J. Flynn, D. Ganguly, L. Chen, N. Lam, H. Tang, A. Do.

Best constant and extremal function for a class Hardy-Mazya-Sobolev inequality

Xi-Nan Ma University of Science and Technology of China

Abstract: We derive an differential identity for a class p-Laplace equation, and then classify all positive finite energy cylindrically symmetric solutions of the equation (1.2) for $3 \le k \le n-1$, with the help of some a prior estimates. The Euler-Lagrange equation associated to the inequality is

$$\begin{aligned} -\Delta_p u &= \frac{u^{p^*(1)-1}}{|y|} \text{ in } \mathbb{R}^n, \\ u &> 0, \\ u &\in D^{1,p}(\mathbb{R}^n), \end{aligned} \tag{1.2}$$

where $p^*(1) = \frac{p(n-1)}{n-p}$, $x = (y,z)$, $\mathbb{R}^n = \mathbb{R}^k \times \mathbb{R}^{n-k}$. As a consequence, we obtain the best constant and the extremal function for the related Hardy-Mazya-Sobolev inequalities. When $p = 2$, the corresponding results was obtained by Mancini-Fabbri-Sandeep in 2006, and Alvino-Ferone-Trombetti posed a conjecture in 2006 for $1 < p < n$. This is joint work with Daowen Lin.

Very weak solutions of the Dirichlet problem for 2-Hessian equation

Guohuan Qiu Chinese Academy of Sciences

Abstract: Weyl's lemma states that every weak solution of Laplace's equation is also a smooth solution. Although 2-Hessian equations have a similar double divergence structure, we find that there is no Weyl's lemma for 2-Hessian equations. For any α small, we construct infinitely many $C^{1,\alpha}$ very weak solutions to the 2-Hessian equation with prescribed boundary value. This is joint work with Tongtong Li.

On elliptic type Harnack inequalities for second order parabolic equations

Mikhail Safonov University of Minnesota

Abstract: The standard Harnack Inequality (HE) for second order elliptic equations states that for any positive solutions in a domain, its values are comparable in any bounded subdomain which lies at a positive distance from the boundary. This automatically implies a similar property for ratios of two solutions. The boundary HE extends this property of ratios to subdomains which lie at a positive distance from a portion of the boundary at which both solutions vanish. Among many applications, this fact is very useful for establishing of boundary regularity of solutions to Fully Nonlinear Equations.

The HE for parabolic equations provides only one-sided estimate for solutions at two points separated in time. In order to get the elliptic type HE, i.e. the estimate without this restriction, the following two assumptions should be met: (i) the domain must be bounded, and (ii) the solutions must vanish on the whole boundary IN SPACE DIRECTION.

There is a convenient way to get rid of bounded lower order terms in second order parabolic equations. It also shows the benefits of considering non-symmetric matrix of coefficients of second derivatives. This method is presented in Remark 6.2 of an old (and mostly outdated) article in https://www-users.cse.umn.edu/~safon002/NOTES/FS/GT1.pdf

It is based on introducing an additional space variable, without any constraints, so that for the new higher dimensional domain, the assumption (i) fails. In the present talk, I plan to address this and other related issues.

Regularity of the Monge-Ampère equation

Xu-Jia Wang Westlake University

Abstract: The Monge-Ampère equation arises in a number of applications, such as affine geometry, differential geometry, and complex geometry. It is also the fundamental equation for optimal transport which found important applications in areas such as artificial intelligence and optical imaging. In this talk we first review the regularity of the Monge-Ampère equation, then discuss the regularity results obtained by the speakers and his collaborators in recent years.

Rigidity of poincare-einstein manifolds with flat euclidean conformal infinity

Fang Wang Shanghai Jiao Tong University

Abstract: In this talk, I first introduce the classical rigidity theorem for Poincare-Einstein manifold, which has conformal compactification in high regularity. Then I will report some recent rigidity result for Poincare-Einstein manifold in the upper half plane model, which take the Euclidean space as its conformal infinity and whose adapted conformal metric has quadratic curvature decay at infinity. This is joint work with Sanghoon Lee (KIAS).

Quantitative stability of the regularity property of optimal transport near the smooth measures on compact manifolds

Micah Warren University of Oregon

Abstract: We use a Korevaar style maximum principle approach to show the following: Fixing a C^2 bound on the log densities of a set of probability measures on a compact manifold, there is a small Wasserstein neighborhood over which all pairs of such measures will have smooth optimal transport. We can do this in spite of unhelpful MTW curvature, by showing that for gradient small enough, the Hessian "bound" places the Hessian in one of two disconnected regions, one bounded and the other unbounded. Following the estimate over a continuity path that starts in the bounded region, we conclude the Hessian must stay bounded.

ABP method to Log-Sobolev inequality

Chao Xia Xiamen University

Abstract: In this talk, we give an ABP (Alexandrov-Bakelman-Pucci) proof to Log-Sobolev inequalities in the Gaussian space or noncompact manifolds with positive Bakry-Emery-Ricci curvature. Then we use this method to establish Log-Sobolev inequalities on noncompact submanifolds in manifolds with nonnegative curvature and log-convex density. This is based on joint work with Guofang Wang.

Some new results on constant rank theorem

Lu Xu Hunan University

Abstract: In this talk, we first introduce the classical constant rank theorem(CRT). Then we give some new progress on CRT. Part of the results are about the "strengthened" versions for semi-linear elliptic equation in n-dimensional Euclidean space, by which we can deduce a rigidity theorem of the solution to the generalized Liouville equation from conformal geometry. Another part of the results concerns the generalized constant rank theorem in hyperbolic space, and we apply them to solve the Christoffel-Minkowski type Problem in this space.

Constant rank theorem for special Lagrangian and quadratic Hessian equations

Yu Yuan University of Washington

Abstract: We present a constant rank theorem for saddle solutions to special Lagrangian and quadratic Hessian equations (a minimum principle for the minimum eigenvalue of Hessian of a solution to elliptic equations satisfying a relaxed convexity, precisely inverse-convexity condition). The argument also leads to new Liouville type results for the special Lagrangian equations with subcritical phase, matching the known rigidity results for semi-convex entire solutions to the quadratic Hessian equation. This is joint work with W. Jacob Ogden.

Optimal boundary gradient estimates for harmonic maps from RCD spaces

Huichun Zhang Sun Yat-sen University

Abstract: In this talk, we introduce some developments for the boundary behaviors of Dirichlet heat kernels and the Gauss-Green formula on metric measure spaces with generalized Ricci curvature, so-called RCD spaces; and then its application to the boundary regularity of harmonic maps from RCD spaces to non-positively curved metric spaces.

Monopolist's profit-maximization v.s. screening problems: a PDE point of view

Shuangjian Zhang Fudan University

Abstract: The principal-agent problem is one of the central problems in microeconomics with many applications. Existence, uniqueness, convexity/concavity, regularity, and characterization of the solutions have been widely studied after Mirrlees and Spence in the 1970s. For multidimensional spaces of agents and products, Rochet and Choné (Econometrica, 1998) reformulated this problem to a concave maximization over the set of convex functions, by assuming agent preferences combine bilinearity in the product and agent parameters with a quasilinear sensitivity to prices. We characterize solutions to this problem by identifying a dual minimization problem. This duality allows us to reduce the solution of the square example of Rochet-Choné to a novel free boundary problem, giving the first analytical description of an overlooked market segment, where the regularity built by Caffarelli-Lions plays a crucial role —— an extension of their regularity work to the quasilinear case is also recently studied.

Blow-down solutions of steady Ricci solitons

Xiaohua Zhu Peking University

Abstract: In a classification process to complete non-compact Ricci solitons, one of major steps is to classify their blow-down ancient solutions. In this talk, I will discuss a classification result on blow-down solutions of steady Ricci solitons with non-negative curvature away from a compact set. This is a joint work with Ziyi Zhao.

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SIMIS

Established with joint support from Shanghai Municipality, Yangpu District, and Fudan University, the Shanghai Institute for Mathematics and Interdisciplinary Sciences (SIMIS) is a pioneering research hub located in Shanghai's Yangpu District. Rooted in the city's innovation ecosystem, SIMIS aims to build a world-class platform for fundamental and interdisciplinary research, focusing on pure mathematics, applied mathematics, and cross-domain applications in AI, biopharma, and beyond. Its mission is to tackle grand scientific challenges, deliver groundbreaking technologies, and cultivate global talent, positioning itself as a leading global mathematics center.

Born to serve China's innovation strategy and Shanghai's vision as a global tech hub, SIMIS bridges academia and industry. Leveraging resources from Fudan University, Tongji University, and scholars across 20+ countries, it dismantles disciplinary silos to forge an innovation triad: fundamental exploration, interdisciplinary synergy, and real-world translation. Nestled in Chuangzhi International Plaza—a nucleus of Shanghai's tech corridor—SIMIS thrives within a "15-minute innovation ecosystem," surrounded by universities and tech giants.

A landmark development is the permanent establishment of the International Congress of Chinese Mathematicians (ICCM) in Shanghai—a premier academic event with global influence. Founded in 1998 by Professor Shing-Tung Yau, Fields Medalist and academician, ICCM hosts annual conferences and triennial congresses, serving as the largest and most impactful platform for Chinese mathematicians worldwide to exchange cutting-edge research, discuss fundamental scientific progress, and foster professional connections. Jointly organized by the Shanghai Institute for Mathematics and Interdisciplinary Sciences (SIMIS) and Fudan University, the 10th ICCM will convene in Shanghai in January 2026, elevating the city's role as an international hub for mathematical dialogue.

Within SIMIS's futuristic architecture, equations collide with real-world challenges, theory sparks invention, and ancient discipline meets modern urgency. As the institute proves daily, when mathematics converges with humanity's greatest questions, it illuminates the path toward a brighter future.

School of Mathematical Sciences, Fudan University

Steeped in the pioneering spirit of the "Su-Chen School," the School of Mathematical Sciences at Fudan University traces its intellectual lineage to the groundbreaking legacies of Su Buqing, founder of China's first differential geometry school in 1952, and Chen Jiangong, a trailblazer in complex function theory. Their pedagogical innovation—the "seminar system," where faculty and students gather to debate formulas and ideas—remains a cornerstone of the school's culture, nurturing rigorous scholarship. This unwavering dedication to academic excellence propelled the school to become one of China's first doctoral programs in mathematics in 1981, a national first-level key discipline in 2007, and a "Double First-Class" discipline under the Ministry of Education in 2022. Today, the school encompasses five departments and three research institutes, spanning pure mathematics, applied mathematics, statistics, and AI-driven mathematical foundations.

Guided by the principles of addressing global scientific frontiers, national strategic needs, economic priorities, and public health challenges, the school has achieved internationally recognized breakthroughs in fundamental mathematics while advancing applied research. Collaborations with institutions like École Normale Supérieure Paris and the University of Cambridge through 30+ dual-degree programs, alongside annual events such as the Shanghai International Mathematics Forum—featuring Nobel laureates like Edward Witten—highlight its global engagement.Leveraging its academic strengths, the school actively contributes to socioeconomic development. By integrating theoretical exploration with real-world applications, it produces strategic policy recommendations and cutting-edge research in AI, integrated circuits, and biomedicine, bolstering Shanghai's "Four Centers" initiative. Partnerships with government agencies and industry leaders have yielded transformative achievements in industry-academia collaboration.

Standing at the threshold of a new century, the School of Mathematical Sciences continues to honor its heritage and embrace national missions.

Shing-Tung Yau Center, Southeast University

Established on July 7, 2017, and restructured as an "academic special zone" on May 10, 2021, the Shing-Tung Yau Center, Southeast University (SEUYC) operates under the leadership of Professor Shing-Tung Yau, Fields Medalist and academician, as its director. Functioning as a "research-focused entity with administrative flexibility," the center bridges pure mathematics and applied sciences, fostering interdisciplinary excellence to advance Southeast University's "Double First-Class" initiative while supporting Jiangsu Province's socioeconomic development through foundational research.

Guided by Professor Yau's pioneering achievements in mathematics and physics, SEUYC conducts high-level academic exchanges and scientific research, emphasizing both theoretical exploration and real-world engineering challenges. Its mission is to harness advanced mathematical theories to address cutting-edge technological problems, amplify interdisciplinary synergies between mathematics, engineering, and medicine, and cultivate a pipeline of top-tier researchers.

The center's research spans pure mathematics—including differential geometry, algebraic geometry, partial differential equations, and mathematical physics—and applied fields such as computational science, medical imaging, data analytics, and smart grid systems. To strengthen its academic footprint, SEUYC prioritizes recruiting rising stars and established scholars in pure mathematics, applied mathematics, and emerging domains like AI, data mining, and intelligent control. Leveraging Southeast University's institutional support, the center offers flexible policies and ample resources to empower talent development.

The staff of the center consists of three parts: teachers and researchers from relevant departments of Southeast University who are closely related to the development and research topics of the center (part-time, not leaving the original secondary units), high-level domestic and foreign hired researchers, postdoctoral researchers and postgraduate students. All personnel entering the center are introduced through the corresponding colleges based on their respective disciplines.

The Shing-Tung Yau Center, Southeast University sincerely invites talents from home and abroad to join us and work together for development.

Transportation Guide

I. Arrival by Air

1. Hongqiao Airport — SIMIS

- **Metro**：Take Metro Line 10 (Jilong Road direction), alight at '**Sanmen Road Station**' (Exit 3). After exiting, walk south along Songhu Road to Block A of Chuangzhi International Plaza (approximately 400 meters, about 7 minutes).
  Total travel time: About 1 hour 10 minutes. Fare: RMB 6.

- **Taxi:** Total travel time: About 1 hour. Fare: RMB 80-120.

2. Hongqiao Airport — SIMIS

- **Metro**：Take Metro Line 2 (National Exhibition and Convention Center direction), transfer to Line 10 (Jilong Road direction) at 'Nanjing East Road Station'. Alight at 'Sanmen Road Station' (Exit 3), then walk south along Songhu Road to Block A of Chuangzhi International Plaza (approximately 400 meters, about 7 minutes).
  Total travel time: About 1 hour 45 minutes. Fare: RMB 7.

- **Taxi:** Total travel time: About 1 hour. Fare: RMB 80-120.

II. Arrival by Train

1. Shanghai Railway Station — SIMIS

- **Metro:** Take Metro Line 4 inner loop (Baoshan Road direction), transfer to Line 10 (Longji Road direction) at 'Hailun Road Station'. Alight at 'Sanmen Road Station' (Exit 3), then walk south along Songhu Road to Block A of Chuangzhi International Plaza (approximately 400 meters, about 7 minutes).
  Total travel time: About 40 minutes. Fare: RMB 4.
- **Taxi:** Total travel time: About 30 minutes. Fare: RMB 30–40.

2. Shanghai Hongqiao Railway Station — SIMIS

- **Metro:**Take Metro Line 10 (Jilong Road direction), alight at 'Sanmen Road Station' (Exit 3). After exiting, walk south along Songhu Road to Block A of Chuangzhi International Plaza (approximately 400 meters, about 7 minutes).
  Total travel time: About 1 hour 20 minutes. Fare: RMB 6.
- **Taxi:** Total travel time: About 1 hour 20 minutes. Fare: RMB 90–140.

3. Shanghai South Railway Station— SIMIS

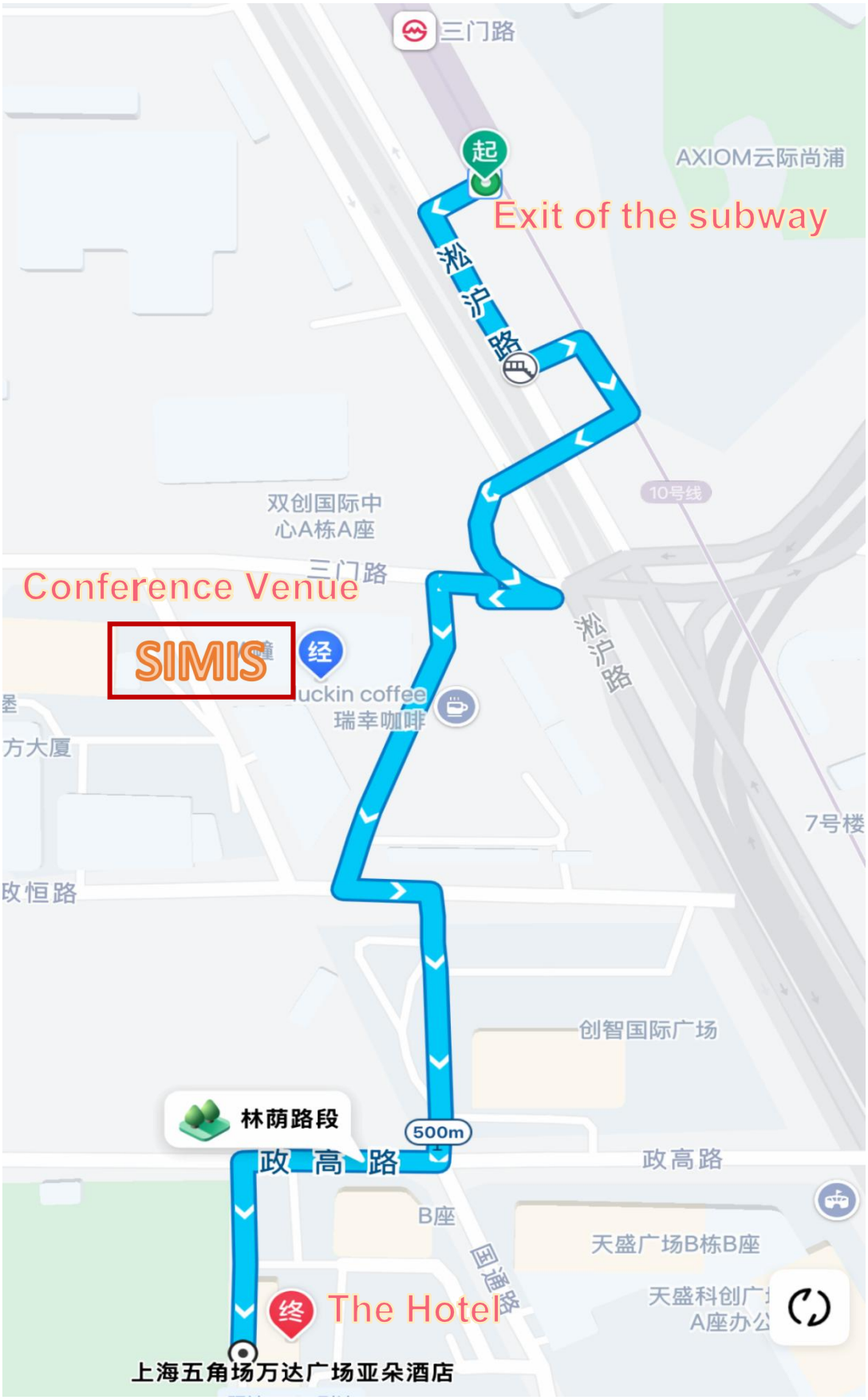
- **Metro:**Take Metro Line 1 (Fujin Road direction), transfer to Line 10 (Jilong Road direction) at South Shaanxi Road Station. Alight at 'Sanmen Road Station' (Exit 3), then walk south along Songhu Road to Block A of Chuangzhi International Plaza (approximately 400 meters, about 7 minutes). Total travel time: About 1 hour 5 minutes. Fare: RMB 5.

- **Taxi:** Total travel time: About 1 hour 20 minutes. Fare: RMB 75–105.

4. Shanghai West Railway Station — SIMIS

- **Metro:** Take Metro Line 11 (Disney Resort direction), transfer to Line 10 (Jilong Road direction) at Jiaotong University Station. Alight at Sanmen Road Station (Exit 3), then walk south along Songhu Road to Block A of Chuangzhi International Plaza (approximately 400 meters, about 7 minutes).
  Total travel time: About 1 hour. Fare: RMB 5.
- **Taxi:** Total travel time: About 35 minutes. Fare: RMB 45–65.

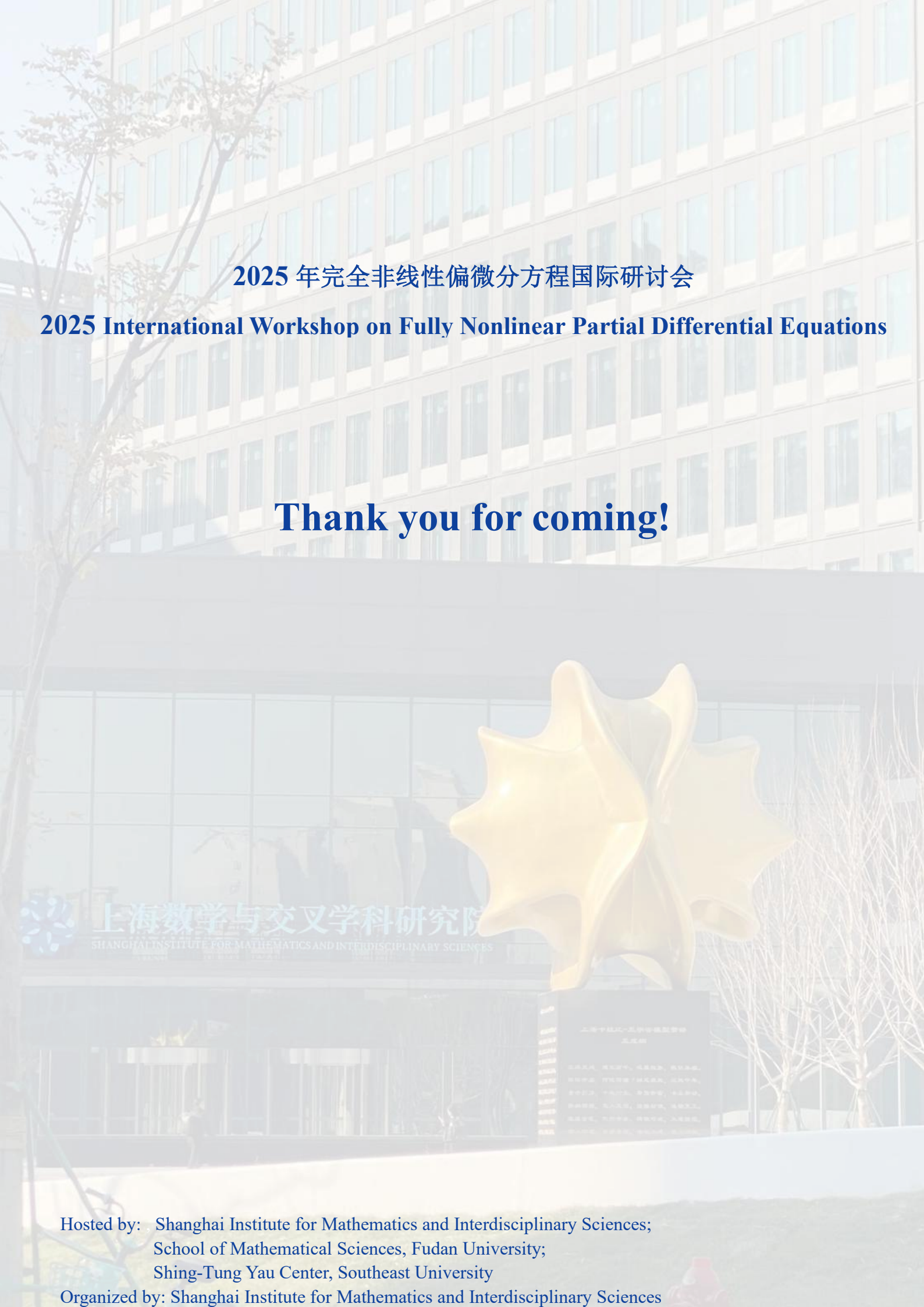
SIMIS Traffic Diagram



2025 年完全非线性偏微分方程国际研讨会

2025 International Workshop on Fully Nonlinear Partial Differential Equations

Thank you for coming!



Hosted by: Shanghai Institute for Mathematics and Interdisciplinary Sciences;
School of Mathematical Sciences, Fudan University;
Shing-Tung Yau Center, Southeast University

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