2026

全国数理逻辑年会

Chinese Annual Conference on Mathematical Logic 2026

2026年6月5日至7日
June 5–7, 2026

清华大学
Tsinghua University

中国·北京
Beijing, China

清华大学
逻辑学研究中心

清華大學 求真书院
Qiuzhen College, Tsinghua University

清華大學 哲学系
Department of Philosophy, Tsinghua University

会议简介

Conference Overview

2026 全国数理逻辑年会于 2026 年 6 月 5–7 日在清华大学举行。本次会议由中国数学会数理逻辑专业委员会主办，清华大学–阿姆斯特丹大学逻辑学联合研究中心、清华大学求真书院、清华大学哲学系联合承办。会议内容包括 4 场大会学术报告、1 场大会科普性报告、4 个分组（集合论、模型论、递归论、哲学逻辑）共 12 场分组学术报告、以及若干学术海报交流展示。

委员会

Committees

专业委员会

丁龙云（南开大学）； 端木昊随（哈尔滨工业大学）； 高速（南开大学）；
何家亮（四川大学）； 李伟（中国科学院数学与系统科学研究院）；
刘奋荣（清华大学）； 彭宁宁（武汉理工大学）； 申国桢（中山大学-珠海）；
施翔晖（北京师范大学）； 宋诗畅（北京交通大学）； 王彦晶（北京大学）；
王轶（山东大学）； 吴刘臻（中国科学院数学与系统科学研究院）；
姚宁远（复旦大学）； 喻良（南京大学）； 赵希顺（中山大学）

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陈铭骏、池幽旻、蒋耀、李鑫、刘奋荣、罗昊轩、马郅真、欧阳文飞、石辰威、孙宇轩、
王威、肖汉、余伟俊、俞珺华、郑文龙、左明家

会议日程

Program

2026全国数理逻辑年会

2026年6月5-7日　清华大学

6月		蒙民伟人文楼	B203 会场		B219 会场	
5日	18:45 -- 19:30	西郊宾馆>>>摆渡车>>>新清华学堂下车点>>>步行>>>蒙民伟人文楼西门 签到 - 蒙民伟人文楼西门大厅				
	19:30 -- 20:40	大会科普性报告	---		刘奋荣 主持	**丁龙云** 南开大学
	20:40 -- 21:00	蒙民伟人文楼西门>>>步行>>>新清华学堂上车点>>>摆渡车>>>西郊宾馆				
6日	8:15 -- 8:50	西郊宾馆>>>摆渡车>>>新清华学堂下车点>>>步行>>>蒙民伟人文楼西门 补充签到 - 蒙民伟人文楼西门大厅				
	8:50 -- 9:25	开幕式 丘成桐 唐文明 高速 致辞 刘奋荣 主持 合影				
	9:25 -- 10:35	大会报告	宋诗畅 主持	**William Johnson** 复旦大学	---	
	10:35 -- 10:50	茶歇				
	10:50 -- 12:00	大会报告	彭宁宁 主持	**Keng Meng Ng** 南洋理工大学		
	12:00 -- 13:00	工作午餐				
	13:00 -- 13:40	分会场报告 **B203 会场** 递归论 **B219 会场** 模型论	递归论 分会场 李文娟 主持	**方楠** 中国科学院	模型论 分会场 叶谨赫 主持	**Yatir Halevi** 以色列理工学院
	13:40 -- 13:45			休息		休息
	13:45 -- 14:25			**吴慧珊** 北京语言大学		**Léo Jimenez** 俄亥俄州立大学
	14:25 -- 14:30			休息		休息
	14:30 -- 15:10			**喻鸿远** 江苏大学		**Pierre Touchard** 德累斯顿工业大学
	15:10 -- 16:00	海报展示	茶歇		---	
	16:00 -- 17:10	大会报告	王彦晶 主持	**Nick Bezhanishvili** 阿姆斯特丹大学		
	17:10 -- 17:30	蒙民伟人文楼西门>>>步行>>>桃李园餐厅三层				
	17:30 -- 19:20	会议晚餐				
	19:20 -- 19:40	桃李园餐厅>>>步行>>>听涛园路口上车点>>>摆渡车>>>西郊宾馆 [专委会常委]桃李园餐厅>>>步行>>>蒙民伟人文楼西门				
	19:40 -- 20:40	专委会常委 闭门会议 **315 会场**	---		---	
	20:40 -- 21:00	[专委会常委]蒙民伟人文楼西门>>>步行>>>新清华学堂上车点>>>摆渡车>>>西郊宾馆				
7日	7:55 -- 8:25	西郊宾馆>>>摆渡车>>>新清华学堂下车点>>>步行>>>蒙民伟人文楼西门				
	8:25 -- 9:05	分会场报告 **B203 会场** 集合论 **B219 会场** 哲学逻辑	集合论 分会场 何家亮 主持	**戴威** 南开大学	哲学 逻辑 分会场 石辰威 主持	**谢凯博** 武汉大学
	9:05 -- 9:10			休息		休息
	9:10 -- 9:50			**张航** 西南交通大学		**熊作军** 西南大学
	9:50 -- 9:55			休息		休息
	9:55 -- 10:35			**申国桢** 中山大学-珠海		**付小轩** 中国政法大学
	10:35 -- 10:50	茶歇				
	10:50 -- 12:00	大会报告	高速 主持	**吴刘臻** 中国科学院	---	
	12:00 -- 12:30	专委会工作汇报 优秀海报颁奖 闭幕式 高速 吴刘臻 主持				
	12:30 -- 13:30	工作午餐				
	13:30 -- 13:50	蒙民伟人文楼西门>>>步行>>>新清华学堂上车点>>>摆渡车>>>西郊宾馆				

题目与摘要

Titles and Abstracts

大会报告

Will Johnson (复旦大学) | *Around generic differentiability and definable groups*

Abstract. One of the ways in which o-minimal structures are topologically tame is that definable functions are generically differentiable, i.e., differentiable on dense open subsets of their domains. Over the years, many variants of o-minimality have been discovered, such as C-minimality, P-minimality, and weak o-minimality. I will sketch why generic differentiability holds in certain cases (including the P-minimal case) and fails in other cases (including the weakly o-minimal case). Generic differentiability has important consequences for the problem of trying to classify the groups or fields definable in a given structure (for example, the field of p-adic numbers). I will sketch these consequences, and discuss what can be proven in the cases where generic differentiability fails.

Keng Meng Ng (南洋理工大学) | *The relative algorithmic strength of problems*

Abstract. A major theme in recursion theory is to calibrate the degree of the undecidability of a given object or problem. To formalise this, one must first develop a reasonable notion of a "reducibility" depending on the particular notion of effectiveness. We discuss several different ways in which this can be done and survey some recent results in this area.

Nick Bezhanishvili (阿姆斯特丹大学) | *Degrees of the Finite Model Property in Superintuitionistic and Modal Logics*

Abstract. I will discuss the phenomenon of the finite model property (FMP) for superintuitionistic and modal logics. I will begin with several simple examples of logics without the FMP. I will then introduce a new notion: the degree of the finite model property for superintuitionistic and modal logics. This notion is analogous to the degree of (Kripke) incompleteness of modal logics introduced by Fine (1974): two logics are said to have the same degree of FMP if their classes of finite frames coincide.

I will show that, in contrast to the Blok Dichotomy Theorem (1978), every countable cardinal, as well as the continuum, can be realized as the degree of FMP of some superintuitionistic or transitive modal logic. This yields a solution to a variant of a long-standing open problem in which the degree of incompleteness is replaced by the degree of FMP. This part is based on joint work with Guram Bezhanishvili and Tommaso Moraschini.

In the final part of the talk, I will show that, without assuming the Continuum Hypothesis, the degree of FMP of every superintuitionistic or modal logic is either countable or the continuum. The proof uses some well-known results from descriptive set theory. This part is joint work with Juan Aguilera and Tenyo Takahashi

吴刘臻 (中国科学院) | *Forcing with Models of Finitely Many Levels*

Abstract. Preserving certain cardinalities is a common step in typical forcing constructions. For the \omega_1 case, many constructions are consequences of properness and can be merged into the framework of forcing with finite models as conditions. Mitchell and Neeman introduced a general framework of forcing with models of two levels, which can preserve two cardinalities. In a restricted setting, we discuss a prototype of forcing with models of finitely many levels.

大会科普性报告

丁龙云 (南开大学) | 从等价关系到波莱尔归约：如何比较数学分类问题

Abstract. 近年来，在描述集合论中，数理逻辑学家们发展出了一个非常有用的工具——波莱尔归约，用于刻画在数学的各个分支里受到关注的等价关系和分类问题之间的相对的复杂程度。在本次报告中，我们将就这一主题，从它的起源到发展现状，做一个综述。

递归论分会场

方楠 (中国科学院) | *Speedability of computably approximable reals and their approximations*

Abstract. An approximation of a real is a sequence of rational numbers that converges to the real. An approximation is left-c.e. if it is computable and nondecreasing and is d.c.e. if it is computable and has bounded variation. A real is computably approximable if it has some computable approximation, and left-c.e. and d.c.e. reals are defined accordingly. An approximation ${a_s}_{s in omega}$ is emph{speedable} if there exists a nondecreasing computable function f such that the approximation ${a_{f(s)}}_{s in omega}$ converges in a certain formal sense faster than ${a_s}_{s in omega}$. This leads to various notions of speedability for reals, e.g., one may require for a computably approximable real that either all or some of its approximations of a specific type are speedable. Merkle and Titov established the equivalence of several speedability notions for left-c.e. reals that are defined in terms of left-c.e. approximations. We extend these results to d.c.e. reals and d.c.e. approximations, and we prove that in this setting, being speedable is equivalent to not being Martin-L"{o}f random. Finally, we demonstrate that every computably approximable real has a computable approximation that is speedable. This is joint work with George Barmpalias, Wolfgang Merkle, and Ivan Titov.

吴慧珊 (北京语言大学) | *The complexity of computable semisimple rings*

Abstract. The theory of semisimple rings plays a fundamental role in noncommutative algebra. We study the complexity of the problem of semisimple rings by the index set method in computable structure theory. We define a computably enumerable ring as the quotient ring of a computable ring modulo a computably enumerable congruence relation and view such rings as structures in the language of rings, together with a binary relation. We prove that the index set of computably enumerable semisimple rings is Σ^0_3-complete. However, the corresponding results on computable semisimple rings are different. Recently, we develop a new d-Σ^0_2 definition for semisimple rings and prove that the index set of computable semisimple rings is d-Σ^0_2-complete. This is a recent joint work with Jake Rhody.

喻鸿远 (江苏大学) | *On the computable FS-jump for equivalence relations*

Abstract. This talk is about the computable FS-jump, an analog of the classical Friedman-Stanley jump in the context of equivalence relations on the natural numbers. Finally, I will introduce my recent works about the FS-jump.

模型论分会场

Yatir Halevi (以色列理工学院) | *Model-theoretic Tameness in Finite Extensions of Groups*

Abstract. A question going back to Meırembekov is whether a finite extension of a stable group must be stable. Simon Thomas subsequently provided a counterexample; however, his example has NIP. One may therefore

still ask whether a finite extension must be tame. A related question is whether a finite-index subgroup of a stable group must be stable.
We answer both questions negatively. We show that finite-index extensions and finite-index subgroups of ω-stable groups can be model-theoretically wild. More precisely, there exists an ω-stable group G such that any given countable first-order structure in a finite language is interpretable both in some finite-index extension of G and in some finite-index subgroup of G.

Joint work with Saharon Shelah.

Leo Jimenez (俄亥俄州大学) | *Domination and semi-minimal analysis in superstable theories*

Abstract. In model theory, the notion of type is of central importance, as completely encoding the properties of some elements in a model. In specific finite-dimensional theories, called superstable, there are two ways to decompose types: domination-equivalence to a product of minimal types, or using a sequence of fibrations, where each fiber is semiminimal. In this talk, I will define these words and explain the connections between these two decompositions. Along the way, I will use differential equations to provide guiding examples, and conclude with an application to Lotka-Volterra systems. This is joint work with Christine Eagles and Yutong Duan.

Pierre Touchard (德累斯顿工业大学) | *On a model-theoretic connection between Coloured Linear Orders and Ordered Abelian Groups By a classical result of Schmitt (1982)*

Abstract. By a classical result of Schmitt (1982), the theory of an ordered abelian group (OAG) is completely determined by that of a coloured linear order (also called chains). It results in a strong model-theoretic connection between the class of OAGs and that of chains. For example, the lexicographic sum of chains is cancellative: Let n b an integer. If X and Y are chains and if the concatenations X+...+X (n times) and Y+...+Y (n times) are isomorphic, then already X and Y are isomorphic(Lindenbaum). Similarly, the lexicographic sum of OAGs is cancellative up to elementary equivalence: if A, B are two OAGs and if the direct products A× ...×A (n times) and B× ... ×B (n times) are elementary equivalent , then already A and B are elementary equivalent. (Giraudet and Delon-Lucas) In this talk, I will develop on this connection and highlight some interesting properties of chains and OAGs. This talk is based on joint work with Boissonneau, De Mase and Jahnke.

集合论分会场

戴威 (南开大学) | *Isometry groups and countable groups with the Lévy propertyess*

Abstract. In the study of extremely amenable groups, the Lévy property, also known as the concentration of measure phenomenon, plays an important role. The Lévy property implies extremely amenability, and historically, many well-known groups are shown to be extremely amenable by proving that they have the Lévy property. In this talk, I will present some new classes of isometry groups and countable groups with the Lévy property. As a consequence, we show that there are at least continuum many pairwise non-isomorphic separable metrizable groups with the Lévy property. Moreover, for any given countable locally finite omnigenous group H, we can choose a Lévy sequence such that its increasing union is isomorphic to H. If time is permitted, we will also discuss some analogous results in continuous logic and mention some open questions. This is joint work with Su Gao and Víctor Hugo Yañez.

张航 (西南交通大学) | *Definability of I-MAD families for nicely defined ideals*

Abstract. We study definability of ideal version maximal almost disjoint (I-MAD) families. Main results includes: (1)For every F_sigma ideal I, there exists no analytic family A of I-positive sets such that every distinct pair a,b in A have a finite intersection and for every I-positive x there exists a in A such that a,x have an

I-positive intersection; (2)Assume V=L. For every F_sigma ideal and every analytic P-ideal (denoted by I) with code r. there exists a Pi_1^1 in r family A of I-positive sets such that (A) every distinct pair a,b in A have an I-small intersection and (B) for every I-positive x there exists a in A such that a,x have an I-positive intersection; (3)There exists a model of [ZF+DC+no well-ordering of the reals] in which for every F_sigma ideal and every analytic P-ideal (denoted by I), there exists a family of I-positive sets with properties (A) and (B). The first one can be proved by modifying A.Tornquist's tree derivative argument. The proof of the second one uses an idea of A.Miller's, and is essentially an application of Spector-Gandy theorem. The model in (3) is the model of "everything" except for a well-ordering of the reals, constructed by Brendle, Castiblanco, Schindler, Wu and Yu. This is a joint work with Jialiang He, Shuguo Zhang and Jiaheng Zhuang.

申国桢 (中山大学-珠海) | *Amorphous sets and dual Dedekind finiteness*

Abstract. A set A is dually Dedekind finite if every surjection from A onto A is injective; otherwise, A is dually Dedekind infinite. An amorphous set is an infinite set that cannot be partitioned into two infinite subsets. A strictly amorphous set is an amorphous set in which every partition has only finitely many non-singleton blocks. It is proved consistent with $mathsf{ZF}$ (i.e., Zermelo--Fraenkel set theory without the axiom of choice) that there exists an amorphous set A whose power set $mathscr{P}(A)$ is dually Dedekind infinite, which gives a negative solution to a question proposed by Truss [J. Truss, emph{Fund. Math.} 84, 187--208 (1974)]. Nevertheless, we prove in $mathsf{ZF}$ that, for all strictly amorphous sets A and all natural numbers n, $mathscr{P}(A)^n$ is dually Dedekind finite, which generalizes a result of Goldstern. This is joint work with Yifan Hu and Ruihuan Mao.

哲学逻辑分会场

谢凯博 (武汉大学) | *A Logical Analysis of Two Interpretations of Nested Counterfactuals*

Abstract. Both causal Bayesian networks (CBNs) and structural causal models (SCMs) can be used to analyze the possibility of counterfactual conditionals: within a certain scope, their predictions regarding the probability distribution under counterfactual assumptions are identical. However, conceptually, the two approaches diverge: CBNs first excute interventions and then calculate probability distributions based on the updated graph, whereas SCMs evaluate the truth of counterfactual conditionals relative to each possible world separately, and subsequently aggregating the probabilities of the worlds that satisfy the statement—a philosophical perspective known as the "Laplacian" interpretation. This talk will analyze the differences between the two interpretations from the perspective of the nesting of modal operators and investigate their logical properties.

熊作军 (西南大学) | 秘密逻辑与秘密推理

Abstract. 报告将以“秘密”与“知识”的理解为切入口，将秘密看作是初始模态算子，分析讨论其对应的逻辑系统。进一步梳理近年来“秘密逻辑”方面的研究进展与主要结果，讨论秘密动态化、推理的保密性、群体秘密等相关扩展研究。

付小轩 (中国政法大学) | *Quantitative Representation of Qualitative Structures*

Abstract. When can a qualitative structure—like a preference ordering or a set of beliefs—be represented by a quantitative measure such as probability? This talk addresses this question by combining modal logic with Farkas' lemma, giving necessary and sufficient conditions for such representations. This reveals a new link between logical consistency and numerical solvability. Building on this, this talk constructs an epistemic logic that axiomatizes Lockean belief under any rational threshold, with soundness and completeness relative to probabilistic semantics. This establishes a correspondence between logical deduction and algebraic feasibility, shedding light on the nature of rationality and qualitative reasoning.

本地信息

Local Information

入校 Campus Entry

自任一校门, 持二代身份证在闸机上刷证通过。

At any campus gate, show your passport and indicate your passport number (used when registering this conference) to security staff at any campus gate.

住宿在西郊宾馆的参会人可乘会议摆渡车入校, 摆渡车终点位于新清华学堂路口(剩余路段机动车禁行)。

Participants staying at XiJiao Hotel may take a conference shuttle to New Tsinghua University Auditorium junction, and then walk to the Venue.

摆渡车时刻 Conference shuttle services

	西郊宾馆院内环岛 XiJiao Hotel roundabout	新清华学堂路口 New Tsinghua University Auditorium junction	听涛园路口 TingTaoYuan junction
6月 5日 June 5th	18:45 ———	———>	/
	<———	———20:55	/
6月 6日 June 6th	08:15 ———	———>	/
	<———	/	——19:40
	<———	———20:55	/
6月 7日 June 7th	07:55 ———	———>	/
	<———	———13:45	/

会场 Venue

B203 & B219　蒙民伟人文楼 Mengminwei Humanities Building.

(位于 第三教室楼 和 文科图书馆 之间)

(between Classroom Build. 3 and Humanities and Social Sciences Library)

签到 Conference Check-in

6 月 5 日 June 5th 18:45-19:30 + 6 月 6 日 June 6th 08:15-08:50
蒙民伟人文楼西门大厅 (west lobby of Mengminwei Humanities Building)

访问网络 Internet Access

Wi-Fi – "eduroam".

4G/5G 网络在 B2 层信号不佳; 4G/5G network signal is weak at level B2.

工作餐 Conference Meals

6 月 6 日 June 6th　午餐:工作套餐 lunch box;
晚餐:桃李园餐厅 3F 桌餐 dinner on the 3rd floor of TaoLiYuan Dining Hall;
6 月 7 日 June 7th　午餐:工作套餐 lunch box.

Useful Apps in Beijing

- Mobile payment: WeChat Pay or Alipay. Better to set it up before your arrival.
- Maps & navigation: Apple Maps or Amap (Gaode Maps 高德地图).
- Taxis/ride-hailing: DiDi (accessible via Alipay and WeChat); distance fare via mobile payment.
- Subway/Metro: No Apps needed (Distance fare; ticket cards at TVMs and counters, cash and mobile payment accepted; selected fare gates accept WeChat or Alipay QR code payment and IC debit/credit cards).

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校园简图

Campus Map