

Major Catalog in School of Mathematical Sciences

| Major | Research Field | Mode | Teaching Language |
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| 基础数学(Pure Mathematics) (070101) | 01. 置换群及代数组论(Symmetric Group and Algebraic Combinatorics) | Full-time | English |
| | 02. 低维拓扑(Low-Dimensional Topology) | Full-time | English |
| | 03. 微分几何与PDE(Differential Geometry and PDE) | Full-time | English |
| | 04. 代数几何(Algebraic Geometry) | Full-time | English |
| | 05. 数论：算术几何，p-进上同调(Number theory: Arithmetic Geometry and P-adic Cohomology) | Full-time | English |
| | 06. 代数表示论(Algebraic Representation theory) | Full-time | English |
| | 07. 算术代数几何和朗兰兹纲领(Arithmetic Algebraic Geometry and Langlands Program) | Full-time | English |
| | 08. 微分几何与数学物理(Differential Geometry and Mathematical Physics) | Full-time | English |
| | 09. 组合数学；图论(Combinatorial Mathematics；Graph Theory) | Full-time | English |
| | 10. 几何群论(Geometric Group theory) | Full-time | English |
| | 11. 场论和弦理论相关的数学物理(Mathematics Physics related to Field theory and String theory) | Full-time | English |
| | 12. 非线性偏微分方程和调和分析(Nonlinear Partial Differential Equations and Harmonic Analysis) | Full-time | English |
| | 13. 双曲型偏微分方程(Hyperbolic Partial Differential Equations) | Full-time | English |
| | 14. 数论与表示论(Number theory and Representation theory) | Full-time | English |
| | 15. 量子拓扑计算和数学物理(Topological Quantum Computation and Mathematic Physics) | Full-time | English |
| | 16. 几何分析和复几何(Geometric analysis and Complex geometry) | Full-time | English |
| | 17. 表示论与自守形式(Representation theory and Automorphic forms) | Full-time | English |
| | 18. 与算术几何相关的代数拓扑问题(Algebraic Topology problem related to Arithmetic Geometry) | Full-time | English |
| | 19. 算术几何与丢番图方程(Arithmetic geometry and Diophantine Equation) | Full-time | English |
| | 20. 分析与偏微分方程(Analysis and Partial Differential Equations) | Full-time | English |
| | 21. 偏微分方程与应用分析(Partial Differential Equations and Applied Analysis) | Full-time | English |
| | 22. 算术动力系统(Arithmetic Dynamics) | Full-time | English |
| | 23. 偏微分方程及其控制(PDEs Control Theory) | Full-time | English |
| | 24. 薛定谔算子谱理论(Spectral Theory of Schrodinger Operators) | Full-time | English |
| | 25. 代数拓扑(Algebraic Topology) | Full-time | English |
| 计算数学(Computational Mathematics) (070102) | 01. 科学计算与大数据分析(Scientific computing and Big Data Analysis) | Full-time | English |
| | 02. 最优化计算方法及其应用(Computational Methods For Optimization and its application) | Full-time | English |
| | 03. 科学计算、计算材料、计算生物(Scientific Computing, Computational Materials Science, Computational Biology) | Full-time | English |

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| 计算数学(Computational Mathematics) (070102) | 04. 图像与数据科学(Image and Data science) | Full-time | English |
| | 05. 机器学习(Machine Learning) | Full-time | English |
| | 06. 科学计算(Scientific Computing) | Full-time | English |
| | 07. 科学计算、随机方法和应用分析(Scientific Computing, Stochastic methods and Applied analysis) | Full-time | English |
| 概率论与数理统计(Probability and Statistics) (070103) | 01. 生物大数据的统计机器学习(Statistical Learning of Biological Big Data) | Full-time | English |
| | 02. 非平衡态统计物理的随机数学模型和理论(Stochastic Theory of Nonequilibrium Statistical Mechanics) | Full-time | English |
| | 03. 随机空间过程与随机几何(Spatial Stochastic Process and Random Geometry) | Full-time | English |
| | 04. 随机分析、偏微分方程(Stochastic Analysis, Differential Equation) | Full-time | English |
| | 05. 离散概率, 统计物理(Discrete Probability, Statistical Physics) | Full-time | English |
| | 06. 随机几何和统计物理(Random Geometry and Statistical Physics) | Full-time | English |
| 应用数学(Applied Mathematics) (070104) | 01. 机器学习(Machine Learning) | Full-time | English |
| 统计学(Statistics) (071400) | 01. 因果推断, 医疗大数据建模分析, 诊断医学统计方法, 流行病传播数学建模(Causal Inference, Statistical Methods in Diagnostic Medicine, Modeling Big Medical Data, Mathematical modelling of epidemic transmission) | Full-time | English |
| | 02. 数理统计、环境统计、数据科学方法(Mathematical Statistics, Statistics for Geophysical Sciences and Data Science Methods) | Full-time | English |
| | 03. 生物统计与生物信息(Biostatistics and Bioinformatics) | Full-time | English |