

# Pure Math at School of Math Zihua Guo





## History

- 1898 Peking University
- 1904 Math department
- 1913 Math admission
- 1952 University Reorganized

   (new math department: Peking, Tsinghua, Yenching)



## Current stage: staff

38 Professors + 17 Associate Professors + 3 Assistant Professors

Analysis: 6+6+1

Geometry and Topology: 9+2+0

Algebra and number theory: 6+6+1

Differential equations: 11+0+0

Mathematical physics: 6+3+1



#### Honors

- 5 Fellows of Chinese Academy of Sciences Kung-Ching Chang, Boju Jiang, Gang Tian, Shichen Wang, Lan Wen
- 10 Distinguished Scholar grant (ARC future fellow)



#### Honors

ICM speaker

plenary: Gang Tian 2002

**Inviting:** 

Gang Tian 1990 Kung-ching Chang 1994 Weiyue Ding 2002 Shichen Wang 2002

 2015 AMS Levi L. Conant Prize Chuanming Zong



#### Recent Top journal publications

- Huijun Fan (with T. Jarvis, Y. Ruan) Annals of mathematics 2013
- Qi'an Guan (with Xiangyu Zhou) Annals of mathematics 2014
- Qi'an Guan (with Xiangyu Zhou) Annals of mathematics 2015
- Qi'an Guan (with Xiangyu Zhou) Inventiones
   Mathematicae 2014
- Gang Tian (with Bing Wang) J. Amer. Math. Soc 2015



Current stage: students

Each year, pure math students

Undergraduate: 20-30 among ~160

PhD: 20 among ~50



#### Research: Analysis

 Nonlinear analysis, Harmonic analysis, Complex analysis

Kung-Ching Chang
Nonlinear analysis
Fellow of Chinese Academy of Sciences
Fellow of Third world academy of sciences
Shiing-shen Chern prize





## Research: Analysis

Xiaohua Zhu Geometric analysis

Distinguished scholar grant
National Natural Science Award (2<sup>nd</sup> class)

(with Gang Tian) J. Amer. Math. Soc 2007 (with Gang Tian) Acta Math. 2000





## Research: Analysis

Qi'an Guan Complex analysis

(with X. Zhou) 2 papers in Annals of Math

(with X. Zhou) 1 paper in Invent. Math





Gang Tian
Geometry

Fellow of American Academy of Arts and Science Fellow of Chinese Academy of Sciences Alan Waterman Award Veblen Prize in Geometry





Geometric analysis, Topology

Boju Jiang

Topology

Fellow of Chinese Academy of Sciences Fellow of Third-world academy of Sciences Shiing-shen Chern prize





Shichen Wang

Topology

Fellow of Chinese Academy of Sciences

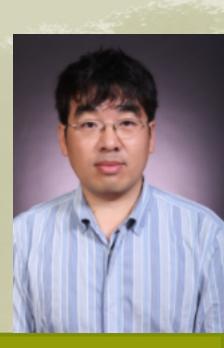
Collaboration with Prof. Rubinstein





Jiajun Wang Topology

Distinguished Scholar grant 2014 (with S. Sarkar) Annals of Math 2010





Research: algebra and number theory

Chuanming Zong
Sphere packing, Geometry of numbers

2015 AMS Levi L. Conant Prize
National Natural Science Award (2nd)
Shiing-shen Chern prize 2007
Distinguished scholar grant 2002





## Research: Differential equations

Lan Wen
Differential Dynamical system

Fellow of Chinese Academy of Sciences Fellow of Third world academy of sciences Hua loo-Keng prize





## Research: Differential equations

Shaobo Gan

Dynamical system

Distinguished scholar grant

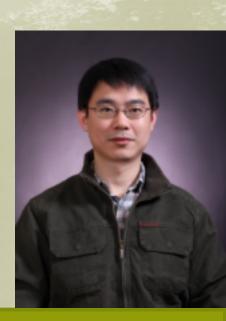




## Research: Differential equations

Zhifei Zhang
PDEs in fluid dynamics

Distinguished Scholar grant





## Research: Mathematical physics

Huijun Fan
Symplectic geometry

Distinguished scholar grant

(with T. Jarvis, Y. Ruan) Annal. Math 2014





Teaching: undergraduate

Courses: complete course system

Seminar: analysis seminar algebra seminar

Research program fund



## Teaching: graduate

Courses: about 13/semester

Seminars

Workshop fund



## Thank you