

THE SHAPE OF RANDOM HYPERBOLIC SURFACES OF WEIL-PETERSSON MODEL

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Time: Sat, Jan. 6th, 10:00-11:30

Venue: Room 102, Shanghai Center for Mathematical Sciences

Abstract: For large genus closed hyperbolic surfaces, their geometry properties may differ greatly from each other. However, for random hyperbolic surfaces of Weil-Petersson model which firstly studied by Maryam Mirzakhani, they look much more similar. In this talk, we will first recall some basic geometric properties on closed hyperbolic surfaces and their moduli space, and introduce the random hyperbolic surfaces of Weil-Petersson model. Then we will show some recent developments on the geometry of these Weil-Petersson random hyperbolic surfaces, aiming to describe the shape of them.

报告人简介: 薛宇皓，法国高等科学研究所 (IHES) 博士后。2023 年 6 月在清华大学获得博士学位。在高亏格随机双曲曲面的研究中取得了系列创新成果。他和合作者对模空间随机双曲曲面的一些经典几何量如最短分离闭测地线长度、第一特征值、直径等的研究从本质上推进了菲尔兹奖获得者 Mirzakhani 的相关工作，特别对随机曲面谱理论的研究首次成功融合了 Selberg 迹公式和曲线模空间理论。他于 2023 年获得中国数学会钟家庆奖。

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