

COLLOQUIUM

Geometry and analysis of moduli spaces of Riemann surfaces

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In his relatively short life, Riemann introduced many deep concepts and methods, and Riemann surfaces and their moduli spaces are certainly among them. The moduli spaces of Riemann surfaces (or algebraic curves) have been intensively studied by many people from different perspectives for the last 150 years, and it is probably safe to say that they will continue to attract people's attention in the coming centuries.

One important approach to study the moduli spaces of Riemann surfaces is to study the action of mapping class groups on Teichmüller spaces, and there are beautiful and fruitful analogies between this action and the action of arithmetic groups such as $SL(n, \mathbb{Z})$ on symmetric spaces. In this talk, we will discuss several questions and results on the geometry, topology and analysis of the moduli spaces.

The lecture will take place in Thackeray 704 at 3:30pm.
Refreshments will start at 3:00pm.