Module PMRF-ISSS009/III/2025
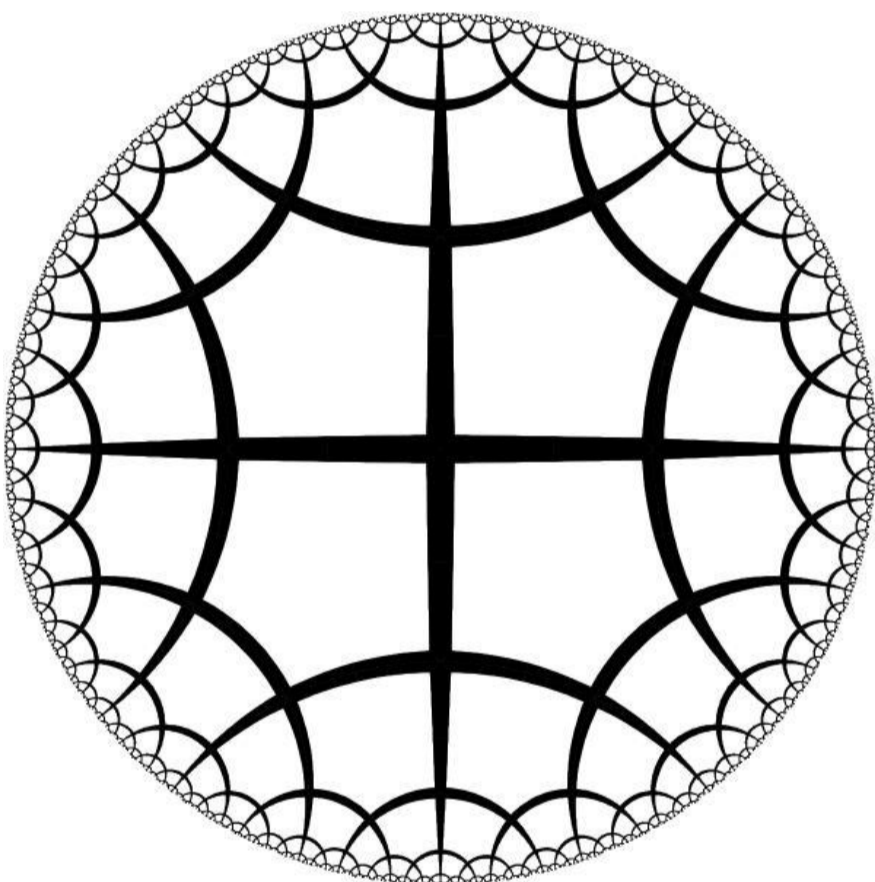
Crash course in metric geometry

Name of the PMRF student

Abhishek Pandey

Required background of the students taught

It is minimal. Basics of Real analysis, Complex analysis, Functional analysis, and Topology

Details of the content of the module

This lecture series is on some basic concepts of metric geometry. Metric geometry is a modern branch of mathematics, where geometric function theory interacts with coarse geometry. We will cover the following contents during the lecture series:

1. Length of curves, parametrizations, Hausdorff measure, and the length formula

1. Length spaces, path integral and conformal metrics

1. Maps, geodesics and geodesics spaces

1. Gluing constructions: length metrics on covering spaces

Schedule of the module

Start Date: January 24, 2025

End Date: February 21, 2025

Timings: Fridays, 4PM to 5:30PM

If required, extra discussion lectures are encouraged

Meeting link : Will be shared later

Link

Contact email ID: isss.forum@gmail.com and abhipmrf@gmail.com

 Registration link: Please fill the

Google form