Course Web Page: math.harvard.edu/~ctm/math275

**Instructor:** Curtis T McMullen

Term: Fall 2020

The first meeting is 12-1:15pm on 3 Sep 2020. Click the Zoom link at left to join the meeting.

**Course Description:** A survey of fundamental results and current research. Topics may include: Ergodic theory and unitary operators; hyperbolic manifolds; geodesic and horocycle flows; Mostow rigidity; Kazhdan's property T; expanding graphs; martingales, random walks and Furstenberg's theorem; unipotent flows and Ratner rigidity; planes in 3-manifolds and moduli spaces.

**Preview:** For some sample lectures and presentations by the instructor, see math.harvard.edu/~ctm/expositions.

**Hardware support:** This course requires the student use of iPads or similar devices. To borrow an iPad from Harvard, send email to <a href="mailto:ipadrequest@fas.harvard.edu">ipadrequest@fas.harvard.edu</a>.