



Pi Day 2026 Presentations

$$e^{i\pi} + 1 = 0$$

**FRIDAY MARCH 13, 2026 FROM 13:00 TO 16:00
ROOM 5B.16**

1. (13:05- 13:10) SPEAKER: MATTHEW BALAS

TITLE: MATHEMATICS CLUB

TOPIC: LEARNING MATHEMATICS FUN BY USING VISUAL PROOFS

2. (13:10 -13:30) SPEAKER: AKIVA AHARON PETEL

TITLE: PYTHAGOREAN TRIPLE:

TOPIC: FROM ANCIENT GEOMETRY TO MODERN TECHNOLOGY

3. (13:30 -13:50) SPEAKER: LOÏC A. NZENANG

TITLE: WHY THINGS VIBRATE

**TOPIC: HOW THE FUNDAMENTAL THEOREM OF ALGEBRA EXPLAINS
OSCILLATIONS**

4. (13:50 -14:20) SPEAKER: SHAHAB SHAHABI

TITLE: HYPERBOLAS @ ANNING-ERDOS THEOREM

**TOPIC: HOW MANY POINTS WHOSE MUTUAL DISTANCES ARE INTEGERS
CAN YOU FIND IN THE PLANE? TWO POINTS? THREE POINTS? FOUR
POINTS? N (ARBITRARY N) POINTS? EVEN INFINITELY MANY POINTS? WE
SHALL EXPLORE THIS PROBLEM AND WILL PROVE A FAMOUS THEOREM,
DUE TO ANNING & ERDOS, USING BASIC PROPERTIES OF HYPERBOLAS.**

5. (14:20 -14:50) SPEAKER: ALEXANDER HARITON

TITLE: ORDINARY DIFFERENTIAL EQUATIONS

**TOPIC: I WILL DISCUSS SEVERAL TECHNIQUES FOR SOLVING ORDINARY
DIFFERENTIAL EQUATIONS. THESE WILL INCLUDE SEPARATION OF
VARIABLES, INTEGRATING FACTORS, AND METHODS FOR SOLVING FIRST
AND SECOND-ORDER LINEAR DIFFERENTIAL EQUATIONS.**

6. (14:50 -15:20) SPEAKER: RAMTIN SASANI

**TITLE: LEBESGUE INTEGRAL AND MEASURE THEORY: A DIFFERENT
APPROACH TOWARDS INTEGRATION**

**TOPIC: DESPITE BEING A CORNERSTONE OF MODERN CALCULUS,
RIEMANN'S METHOD OF DEFINING INTEGRALS HAS ITS LIMITATIONS. IN
THIS TALK, WE WILL SEE HOW LEBESGUE PROVIDED AN ALTERNATIVE
WAY OF CALCULATING INTEGRALS, WHICH IS CLOSELY CONNECTED TO
THE IDEA OF MEASURABLE SETS.**