

Below is a list of the Spring 2020 vSDMC recordings. They may have been lightly edited. **A password is required to access these recordings; this password can be found in the SDMC weekly messages from Spring 2020.**

An archive of past recordings can be found here: [SDMC recordings archive](#)

Parents: contact us at v.sdmathcircle@gmail.com to report offensive or inappropriate footage.

May 23:

Fermat: Introduction to Game Theory (Anlin and Hannah Zhang, Princeton and SDMC)
https://mit.zoom.us/rec/share/1eVREamp12IJGavQ5Ez4AqIsAqb3eaa8g3Ma8qYJyElzHhAFQkG1kH1DNed_R2q7?startTime=1590243834000

Euler: Volumes on Volumes (Yana Mohanty, Imathgination LLC)
https://mit.zoom.us/rec/share/-uN3DKP_6ltOYrfwuV3iXZYsR5_Kaaa8hnVlr_QEnU_9B9ZAZuLxC0B4rfvWhIEp?startTime=1590255671000

Gauss/Cauchy: No classes due to USEMO

May 16:

No classes due to FARML

May 9:

Fermat: Prime Numbers (Kevin Ren, MIT)
https://mit.zoom.us/rec/share/_9RMK5btYWpORa-W62LHX_85PaK0eaa80XBM8qcNzBxqF4LKdQWzmVG0wNDZCzcx?startTime=1589038490000

Euler: Finite Differences (Kevin Ren, MIT)
https://mit.zoom.us/rec/share/6NBaI6Ho9DILG7eQ4IOAXYIkH9i4aaa81CMXr_MOnh1JwiVYXBSUPeq3GBKJWqF6?startTime=1589045904000

Gauss/Cauchy: Intro to the Elegant and Refined Art of Barycentric Coordinates
(Christine Yang, Arizona)

Part I

<https://mit.zoom.us/rec/share/7OFbE6vsrGpIYY3B5Bn-HfQhO7X9T6a80CBNqKALnk8yhXAr0BLVSqbaJe-W8W2E?startTime=1589039332000>

Part II

https://mit.zoom.us/rec/share/59JLCrHSqVxIZK_872bGHZwvPNj3X6a82nQZqfYNzh4FPGkWml2k2Ctt-IgEa-ux?startTime=1589045578000

May 2:

Fermat: Combinatorial Tricks and Strategies Part II (Derek Liu, SDMC)

https://mit.zoom.us/rec/share/w4t6DLeqxEhOAbPpsXHaWrwuL8POaaa8gCBN-6BfmE5NaOPDEKUCG9UzPuo39FF_?startTime=1588434343000

Euler: Structure mod p (Kevin Ren, MIT)

<https://mit.zoom.us/rec/share/6MltLJTg6GIOTYHg7WiEaKo9Adnreaa8hnQZ-aUPzRvblsoGs77NTpgZ7n92keZM?startTime=1588441025000>

Gauss/Cauchy X: Ratio Lemma in Geometry (Ankit Bisain, SDMC)

<https://mit.zoom.us/rec/share/7p02L7Hry0FIQY3ztXr8B4UIMd-6aaa8gCkd-PUOxKLI3ocZQvA3Kssl01MCG0g?startTime=1588434694000>

Gauss/Cauchy Y: Discrete Fourier Transform (Tristan Shin, MIT)

<https://mit.zoom.us/rec/share/3MpwEOnL1GhJGdbEuW6EZ4A-BlvCaaa81ScX-6YNyMyTgr4TyUBXINJ354xGJKg?startTime=1588441015000>

April 25:

Fermat: Algebra Factoring Tricks (Anlin and Hannah Zhang, Princeton and SDMC)

https://mit.zoom.us/rec/share/9-AvI5f-8UhOQ9aU9Er_d419IL_HT6a8hikb8_ReyBrP0vB2eB5eh4d6kps_9p-b?startTime=1587829026000

Euler: Problems of Marriage (Rachana Madhukara, MIT)

<https://mit.zoom.us/rec/share/v8cvDZjL3WROEqPg6AL0dpYTQLi9T6a81XJLqKYLmh1kdwZ5BDJ-fbpBHS-BgT9h?startTime=1587835859000>

Gauss/Cauchy X: Counting Lattice Paths (Ben Lou, SDMC)

https://mit.zoom.us/rec/share/4ZZNCJPf3WFOa6_mxgLcd6x4P77hX6a80SEa8_IJyBqu0WTQ2CoKPvs93BXQKEKL?startTime=1587830009000

Gauss/Cauchy Y: Abstract Algebra (Tristan Shin, MIT)

<https://mit.zoom.us/rec/share/uYstC6PT6WJLSNbO5kXBfb4kTqC5aaa80HIZrPUlzU2CfcpfihEelkCLtvGdHdfB?startTime=1587836927000>

April 18:

Fermat/Euler: Snapology Origami (Yana Mohanty and David Honda)

Fermat:

https://mit.zoom.us/rec/share/4ZMsNa__115OBavMzRnDAf5wEbz_aaa8hiNN8_EOy74vKxGz5l5fPXcvb4BdePg?startTime=1587223714000

Euler:

https://mit.zoom.us/rec/share/--hXK6PZ5mFLY53390GAWqloMNXZT6a80yNN_aAFnUZhkiokVcPmYbdxkVJwwU2?startTime=1587231281000

There was no Gauss/Cauchy X class.

Gauss/Cauchy Y: Arrow's Theorem (Tristan Shin, MIT)

https://mit.zoom.us/rec/share/v9ZFJa_8rEdlUK_8sFz1VfZ7Edr_X6a8g3QXqPUJyx4baeWcmDSs5DbVGZpG0xES?startTime=1587230157000

April 11:

Fermat: Combinatorial Tricks and Strategies (Derek Liu, SDMC)

<https://mit.zoom.us/rec/share/5eptNrvT2yRIX9bo1VPEeJYtD925X6a80HNP-fftzx7FPB-8j-XoSM7TJ81wfZtX?startTime=1586618322000>

Euler: Cardinal Numbers (Rachana Madhukara, MIT)

https://mit.zoom.us/rec/share/_80oJJO35H5IG7fC-m_QXpUROYXMX6a8hiRN_6AKyB1zpwtBdbWF7aec1V3Sn5ei?startTime=1586626408000

Gauss/Cauchy:

https://mit.zoom.us/rec/share/_PYvDrDzriBOAdLd5H6AW48LO7v1X6a803Md-6AMxUfVdZG1VzJoUjVxT7eflR2u?startTime=1586618793000

0:00: Estimation Techniques (Ben Shimabukuro, SDMC)

2:01:00: Virtual Estimation Competition (Ben Shimabukuro, SDMC)

April 4:

Fermat and Euler:

https://mit.zoom.us/rec/share/94tLL5Tt_X1LeaOW9l_kZI8cBla-aaa82iAW8qAPxRz7F5ysAmoU30O10dmLaxHo?startTime=1586014488000

0:00 - [Fermat] Exploring Quadratics (Christine Yang, Arizona)

1:54:30 - [Euler] Number Theory and Cryptography (Zechariah Zhu, UCLA)

Gauss/Cauchy X: Structure mod p (Kevin Ren, MIT)

https://mit.zoom.us/rec/share/ucVTKbPh5H9JG6Pi9ljTWoQjQaPYaaa8hiYX__texEY55odl7VqQpx8V6rqgAbso?startTime=1586014855000

Gauss/Cauchy Y: LaTeX (Intro, Tips, and Tidbits) (Tristan Shin, MIT)

https://mit.zoom.us/rec/share/tO1tE5Sq6GdOWY3Q1GrWC68dPra__eaa8gyUY86EJmkt5XojeEDGZUhDoliLp_SHN?startTime=1586021995000

March 28:

Fermat: Continued fractions and rational approximation (Jacob Zhang, MIT)

<https://mit.zoom.us/rec/share/xsJSdoriykJLZI3St0fAQ5cnJaHZaaa8gyAdrvAPyEIPrR6LoXLeCoXTI-549hQ?startTime=1585408292000>

Euler: Poker Probabilities (Tristan Shin, MIT)

<https://www.dropbox.com/s/9555ug6dnfsvg28/2020-03-28-FE-Y.mp4?dl=0>

Gauss/Cauchy

https://mit.zoom.us/rec/share/3_Apl5azq0xJc4nQtEyPY5EBENXIT6a8hyYdqKIKut8waCtMi0bTN8XDkA_xJw?startTime=1585410482000

0:00 - Invariants and Monovariants: Finding Value (Ben Lou, SDMC)

1:51:50 - Linear algebra: a new perspective (Kevin Ren, MIT)

March 21: Info Session

https://mit.zoom.us/rec/share/vMspHuivrH5Jb6fGynz2A6J9OKvIT6a82iRP_aELzxo7UNPTuBk8JI_o7W4U0acb?startTime=1584803914000