# Mathcamp 2023 Week 1 Schedule 

| Time | Room | Tuesday | Wednesday | Thursday | Friday |  | Saturday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8:00-9:00 | IDX Dining Hall | Breakfast |  |  |  |  |  |
| 9:10-10:00 | CCM 221 | Introduction to linear algebra $\boldsymbol{\lambda}$ (Narmada) |  |  |  |  |  |
|  | CCM 233 | Cubic curves ${ }^{\boldsymbol{j} \boldsymbol{j} \text { (Mark) }}$ |  |  |  |  |  |
|  | CCM 442 | Inspecting gadgets गोग (Della) |  |  |  |  |  |
|  | CCM 444 |  |  |  |  |  |  |
|  | JLC 301 | Fourier series $\boldsymbol{j}$ (Jonathan Tannenhauser) |  |  |  | Hlod onto yoru ahts! ${ }^{1} \boldsymbol{j} \boldsymbol{\dagger}$ (Tim!) |  |
| 10:10-11:00 | CCM 233 | Multivariable calculus crash course $\boldsymbol{j} \boldsymbol{\$}$ (Mark) |  |  |  |  |  |
|  | CCM 442 | Metric spaces $\boldsymbol{j}$ (Krishan) |  |  | Homotopy groups of spheres $\boldsymbol{j}$ (Kevin) |  |  |
|  | CCM 444 | Reverse mathematics ${ }^{\text {j }}$ (Steve) |  |  |  |  |  |
|  | JLC 301 | Discreet calculus (shh!) $\boldsymbol{\boldsymbol { \rho }}$ (Travis) |  |  |  |  |  |
|  | JLC 302 | Introduction to number theory $\boldsymbol{>} \boldsymbol{>}$ (Mia) |  |  |  |  |  |
| 11:10-12:00 | CCM 221 | Introduction to group theory $\boldsymbol{j}^{\boldsymbol{D}}$ (Eric) |  |  |  |  |  |
|  | CCM 442 | Knot invariants $\boldsymbol{j g j}^{\text {(Raj) }}$ |  |  |  |  |  |
|  | CCM 444 | Information theory and the redundancy of English (Mira Bernstein) |  |  |  |  |  |
|  | JLC 301 | Geometry, under construction (Arya) |  |  |  |  |  |
|  | JLC 302 | Erdős's distinct distance problem $\boldsymbol{j} \boldsymbol{j} \boldsymbol{\text { 万 }}$ (Neeraja) |  |  |  |  |  |
| 12:00-1:00 | IDX Dining Hall | Lunch |  |  |  |  |  |
| 1:10-2:00 | CCM 221 | [HR] Problem solving: geometry galore $\boldsymbol{\text { D }}$ (Ian) |  |  |  |  |  |
|  | CCM 442 | Infinite arithmetic ذ力ן (Susan) |  |  |  |  |  |
|  | CCM 444 | Is it possible to gamble successfully? (Tanya) |  |  |  |  |  |
|  | JLC 302 | Bhargava's cube $\boldsymbol{j} \boldsymbol{j}$ (Kevin) |  | The transcendence of many numbers (including $\pi$ and e) (Week 1 of 2) (Dave Savitt) |  |  |  |
|  | JLC 305 | [HR] Mathcamp crash course $\boldsymbol{\lambda}$ (Charlotte) |  |  |  |  |  |
| 2:00-4:00 | EATS | TAU |  |  |  | 2:00-3:30 | AA Meetings |
| 4:10-5:00 | CCM Auditorium (Fri: IDX Gym) | Voting theory, Burlington, VT, and the GibbardSatterthwaite theorem (Mira Bernstein) | Mediants, circles, and Stern-Brocot patterns (Assaf Bar-Natan) | Hacking heads off hydras (Susan) | The only formula it can be! (Noah Snyder) | 3:45-5:15 | Relays in the Aiken Quad (bring water!) |
| 5:30-7:00 | IDX Dining Hall | Dinner |  |  |  |  |  |

Key: [HR]—Homework Required

