

# Mathcamp 2018 Week 4 Schedule

| Time        | Room          | Tuesday  | Wednesday                           | Thursday  | Friday  | Saturday  |  |
|-------------|---------------|--|-------------------------------------|---|---|---|--|
| 7:00 – 9:00 | Mines Market  | Breakfast  |                                     |   |   |   |  |
| 9:05–9:55   | Alderson 162  | Assembly<br>(Berthoud 241)   |                                     |   | ARML Power Rounds ♪ (Misha)   |   |  |
|             | Alderson 230  |  |                                     |   | Public-Key Cryptography ♪ → ♪♪ (J-Lo)   |   |  |
|             | Brown 125     |  |                                     |   | Differential Topology ♪♪ (Kevin)  |   |  |
|             | Brown 206     |  |                                     |   | [HR] Representation Theory (2/2) ♪♪♪ (Aaron)                                    |   |  |
|             | Brown W375    |  |                                     |   | The Erdős Distance Problem ♪♪ (Ben)   |   |  |
| 10:10–11:00 | Alderson 162  | ARML Power Rounds  |                                     |   | The Fundamental Group ♪♪ (Larsen)   |   |  |
|             | Alderson 230  | Public-Key Cryptography  |                                     |   | Mathematical Art History ♪ (Viv)  |   |  |
|             | Brown 125     | Differential Topology  |                                     |   | [HR] Mathematics of Democracy ♪ (Mira)  |   |  |
|             | Brown 206     | Representation Theory (2/2)  |                                     |   | Trail Mix ; ♪? (Mark)   |   |  |
|             | Brown W375    | The Erdős Distance Problem   | Visualizing Groups ♪ (Sara)         |   | Hat Problems ft. Hamming Codes ♪ → ♪♪ (Agustin)                                 | Teaching Computers to Read ♪ ( <i>Greg Burnham</i> )  |  |
| 11:15–12:05 | Alderson 162  | [HR] The Continuum Hypothesis (2/2) ♪♪♪ (Susan)  |                                     |   |   |   |  |
|             | Alderson 230  | [IBL] Simple Models of Computation ♪ (Pesto)   |                                     |   |   |   |  |
|             | Brown 206     | Commutative Algebra and Algebraic Geometry (2/2) ♪♪ → ♪♪♪ (Mark)   |                                     |   |   |   |  |
|             | Brown W375    | Machine Learning (No Neural Nets) ♪♪ (Linus)   |                                     |   |   |   |  |
|             | Brown 125     | Knot Theory ♪ (Jeff)   |                                     |   |   |   |  |
| 11:30–1:00  | Mines Market  | Lunch  |                                     |   |   |   |  |
| 1:10–2:00   | Alderson 230* | [HR] [IBL] Cohomology via Sheaves ♪♪ → ♪♪♪ (Apurva)  |                                     |   |   |   |  |
|             | Brown 125     | Rational Points on Elliptic Curves ♪♪ (Shiyue)   |                                     |   |   |   |  |
|             | Brown 206     | Ramsey Theory ♪ (Misha)  |                                     |   |   |   |  |
|             | Brown W375*   | [IBL] Intersecting polynomials ♪ (Tim!)  | Combinatorial Designs ♪ → ♪♪ (Ania) |   |   |   |  |
|             | Marquez 026   | [HR] Infections, contractions, and tumors, Oh My! Agent Based Modeling of Biological Systems. ♪ → ♪♪ ( <i>Angela Gallegos &amp; Kamila Larripa</i> ) |                                     |   |   |   |  |
| 2:00–4:00   | Brown Lobby   | TAU  |                                     |   | 2:00-3:30   | AA Meetings (bring your blurbs!)                      |  |
| 4:00–5:00   | BW280         | Is Mathematics Biology's Next Microscope?<br>( <i>Angela Gallegos &amp; Kamila Larripa</i> )   | Quantum Hack<br>(J-Lo)              | Quantum Mathematicians<br>( <i>Scott Strong</i> ) | Building machines that learn and think like people<br>( <i>Josh Tenenbaum</i> ) | 3:45–5:15<br>Relays in Stratton Common (Bring water!) |  |
| 5:00–6:30   | Mines Market  | Dinner   |                                     |   |   |   |  |

Key: [HR] — Homework Required [IBL] — Inquiry Based Learning

*Special Note:* On Tuesday and Wednesday Alderson 230 becomes Alderson 162 and Brown W375 becomes Alderson 230.