## Mathcamp 2024 －Week 1 Schedule［REVISED］

|  |  | Tuesday | Wednesday |  | Thursday |  | Friday | Saturday |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 9: 10- \\ & 10 \mathrm{am} \end{aligned}$ | T171 | Geometric algebra（Ari Nieh） |  |  |  |  |  |  |  |  |
|  | T193 | $[\mathbf{H W}] \Delta$ Intro group theory $\boldsymbol{D} \boldsymbol{J}$（Susan） |  |  |  |  |  |  |  |  |
|  | T387 | From Hall＇s theorem to maximum flows（Mark） |  |  |  |  |  |  |  |  |
|  | W218 | Network algorithms \＆game theory（Sonya） |  |  |  |  |  |  |  |  |
|  | W402 | Are there no－where differentiable continuous functions？（Laithy） |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 10: 10- \\ & 11 \mathrm{am} \end{aligned}$ | T171 | Theory of computation（Athina） |  |  |  |  |  |  |  |  |
|  | T197 | $[\mathbf{H W}] \triangleq$ Mathcamp crash course $\boldsymbol{\rho} \boldsymbol{\operatorname { s i n }}$（Zach） |  |  |  |  |  |  |  |  |
|  | T387 | King chicken theorems（Marisa） |  | 4 Advanced chickenology（Misha） |  |  |  |  |  |  |
|  | T193 | 4 The circle method and Waring＇s problem（Kevin） |  |  |  |  |  |  |  |  |
|  | W402 | A recipe for resolving real riddles（Glenn） |  |  |  |  |  |  |  |  |
| 11：10 <br> am－ <br> noon | T171 | $\boldsymbol{*}$ Probabilistic method in graph theory and $k$－SAT problems $\boldsymbol{j}$（Kailee） |  |  |  |  |  |  |  |  |
|  | T193 | $\triangle$ Linear algebra（intro）（week 1 of 2）（Mark） |  |  |  |  |  |  |  |  |
|  | T197 | Ordinals and cardinals（Krishan） |  |  |  | Surreal numbers（Krishan） |  |  |  |  |
|  | W218 | How fast can we Banach this Tarski？（Narmada） |  |  |  |  |  |  |  |  |
|  | W402 | Geometric geometry（Arya） |  |  |  |  |  |  |  |  |
| Lunch |  |  |  |  |  |  |  | $\begin{gathered} \text { noon-2 } \\ \text { pm } \end{gathered}$ | Wheelock | Lunch（until 1：30 pm） and Advisor Meetings |
| $\begin{gathered} 1: 10-2 \\ \mathrm{pm} \end{gathered}$ | T171 | Graph inequalities by magic $\boldsymbol{j}$（Travis） |  | Calculus wars $\boldsymbol{j}$（Travis） |  | Toppling sandpiles $\boldsymbol{j} \boldsymbol{D}$ （Travis） |  |  | Wheelock |  |
|  | T193 | Special relativity（Nic Ford） |  |  | No class |  | pecial relativity | $\begin{gathered} 2-2: 30 \\ \mathrm{pm} \end{gathered}$ | Wheelock | Ask next week＇s teachers |
|  | T387 | （1）Problem solving：inequalities（Misha） |  |  |  |  |  | $\begin{gathered} 2: 40-3: 30 \\ \mathrm{pm} \end{gathered}$ | T171 | Toppling sandpiles |
|  | W218 | （c） 4 Intro to number theory（Chloe） |  |  | No class | Number Theory <br> MCSP：Euler char．万力力（Della） |  |  |  |  |
|  | W402 | © 4 MCSP：Jordan curve | © $\downarrow$ MCSP：linear programs | MCSP：inclusion exclusion（Della） |  |  |  | T193 | Special relativity |  |
|  | W402 | $0 \mathbf{D}$（Della） | 00 （Della） |  |  | T387 | PS：inequalities |  |  |  |
|  |  |  |  | T193Most beautiful equation <br> （Po－Shen Loh） |  |  |  |  |  | W218 | Number Theory |
| $\begin{aligned} & 2-4 \\ & \mathrm{pm} \end{aligned}$ | Thompson | TAU |  |  |  |  |  |  | W402 | MCSP：duality $0 \ggg>$ （Della） |
| $\begin{gathered} 4: 10-5 \\ \mathrm{pm} \end{gathered}$ | M103 <br> （Colloquium） | My favorite prime（Zach） | The quest for atonal spheres （Travis） |  | Guest colloquium （Po－Shen Loh） | M103 | Impostor <br> phenomenon（Staff） |  | $\begin{gathered} 3: 40-5: 15 \\ \mathrm{pm} \\ \hline \end{gathered}$ | Relays near the Obelisk！ |  |

Evening
Team Problem Solving
Fourth of July Fireworks

Meals：Breakfast 7－9 am，Lunch 11：30 am－1：30 pm，Dinner 4：30－6：30 pm（Wheelock）
Key：$\quad \mathrm{M}=$ McIntyre $\quad \mathrm{T}=$ Thompson，$\quad \mathrm{W}=$ Weyerhaeuser，$\quad[\mathbf{H W}]=$ Homework Required，
$\boldsymbol{\top}$＝Class meets for 80 minutes $1: 10-2: 30 \mathrm{pm}$（through first 30 minutes of TAU），$\quad \boldsymbol{\mathcal { Z }}=$ Has continuation as a project $\quad \Delta=$ Serves as a prerequisite for several other classes

