Sage Days 22: MSRI Graduate Student Workshop Schedule

| Monday, June 21 |  |
| :---: | :---: |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am | Ride bus to MSRI |
| 9:00am - 9:30am | Arrive at MSRI and sign in |
| 9:30am - 9:45am | MSRI director: introduction and orientation |
| 9:45am - 10:00am | Stein: Introduction and orientation about this workshop |
| 10:00am - 10:55am | Dokchitser: talk 1 |
| 11:00am - 11:55am | Weinstein: talk 1 |
| 12:00pm - 2:00pm | Lunch |
| 2:00pm - 2:50pm | Greenberg: talk 1 |
| $3: 00 \mathrm{pm}-3: 30 \mathrm{pm}$ | Participant introductions |
| $3: 30 \mathrm{pm}-4: 00 \mathrm{pm}$ | Tea |
| 4:00pm - 6:10pm | Working Sessions |
| 5:55pm, 6:25pm, 7:15pm | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |
| Tuesday, June 22 |  |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am | Ride bus to MSRI |
| 9:00am - 9:30am | Stein: Project status reports |
| 9:30am - 10:20am | Cremona: talk 1 - Tables of Elliptic Curves |
| 10:30am - 11:20am | Greenberg: talk $2-$ Arithmetic of $p$-adic and mod $p$ representations |
| 11:30am - 12:20pm | Wuthrich: talk 1 |
| 12:20pm - $2: 00 \mathrm{pm}$ | Lunch at MSRI |
| 2:00pm - 6:10pm | Working sessions |
| $3: 30 \mathrm{pm}-4: 00 \mathrm{pm}$ | Tea |
| 5:55pm, 6:25pm, 7:15pm | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |
| Wednesday, June 23 |  |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am, 9:10am | Ride bus to MSRI |
| 9:30am - 10:00am | Stein: Project status reports |
| 10:00am - 10:50am | Cremona: talk 2 - Verifying optimality and Manin's conjecture |
| 11:00am-11:50am | Stein: talk 1 - Computing Heegner points in Sage |
| 11:30am - | Workshop Barbecue at Willows Picnic Site |
| 5:55pm, 6:25pm, 7:15pm | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |
| Thursday, June 24 |  |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am, 9:10am | Ride bus to MSRI |
| 9:30am - 10:00am | Stein: Project status reports |
| 10:00am - 10:50am | Cremona: talk 3 - Computing Isogenies |
| 11:00am - 11:50am | Cremona: talk 4 - Finding all elliptic curves with good reduction outside a given set of primes |
| 12:00pm - 2:00pm | Lunch at MSRI |
| 2:00pm - 6:10pm | Working sessions |
| 5:55pm, 6:25pm, 7:15pm | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |
| Friday, June 25 |  |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am | Ride bus to MSRI |
| 09:00am - 09:10am | Millman and Stein: Welcome |
| 09:10am - 10:10am | Norvig (Google): What to demand from a Scientific Computing Language |
| 10:10am - 11:00am | Perez (Berkeley) Python: an ecosystem for scientific computing |
| 11:00am-11:50am | Bradshaw (Google): Cython: the best of both worlds |
| 12:00pm - $2: 00 \mathrm{pm}$ | Lunch |
| 1:00pm - $2: 50 \mathrm{pm}$ | Ramachandran (IIT Bombay): Python in science and engineering education in India |
| 2:50pm - 3:40pm | Stein (Univ of Washington): Sage: creating an open source alternative to Ma* |
| $3: 40 \mathrm{pm}-4: 10 \mathrm{pm}$ | Tea |
| 4:10pm - 5:00pm | Millman (Berkeley): The Foundation for mathematical and scientific computing |
| 5:00pm - 6:10pm | Discussion |
| 5:55pm, 6:25pm, 7:15pm | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |


| Monday, June 28 |  |
| :---: | :---: |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am, 9:10am | Ride bus to MSRI |
| 9:30am - 10:00am | Stein: Project status reports |
| 10:00am - 10:50am | Weinstein: talk 2 |
| 11:00am - 11:50am | Greenberg: talk 3 |
| 12:00pm - 2:00pm | Lunch at MSRI |
| 2:00pm - 4:00pm | Working sessions |
| 4:00pm - 5:00pm | Cremona's students: presentations |
| $5: 55 \mathrm{pm}, 6: 25 \mathrm{pm}, 7: 15 \mathrm{pm}$ | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |
| Tuesday, June 29 |  |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am | Ride bus to MSRI |
| 9:00am - 9:30am | Stein: Project status reports |
| 9:30am - 10:20am | Wuthrich: talk 2 |
| 10:30am - 11:20am | Weinstein: talk 3 |
| 11:30am - 12:20pm | Dokchitser: talk 2 |
| 12:20pm - 2:00pm | Lunch |
| 2:00pm - 6:10pm | Working sessions |
| 5:55pm, 6:25pm, 7:15pm | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |
| Wednesday, June 30 |  |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am | Ride bus to MSRI |
| 9:00am - 9:30am | Stein: Project status reports |
| 9:30am - 10:20am | Wuthrich: talk 3 |
| 10:30am - 11:20am | Dokchitser: talk 3 |
| 11:30am - 12:20pm | Ribet: Colloquium on Galois Representations |
| $12: 20 \mathrm{pm}-2: 00 \mathrm{pm}$ | Lunch at MSRI |
| 2:00pm - 3:00pm | Kilford: A Gentle Introduction to Overconvergent Modular Forms |
| 3:00pm - 6:10pm | Working sessions |
| $5: 55 \mathrm{pm}, 6: 25 \mathrm{pm}, 7: 15 \mathrm{pm}$ | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |
| Thursday, July 1 |  |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am | Ride bus to MSRI |
| 9:00am - 9:30am | Stein: Project status reports |
| 9:30am - 10:20am | Dokchitser: talk 4 |
| 10:30am - 11:20am | Wuthrich: talk 4 |
| 11:30am - 12:20pm | Weinstein: talk 4 |
| $12: 20 \mathrm{pm}-2: 00 \mathrm{pm}$ | Lunch at MSRI |
| 2:00pm - 6:10pm | Working sessions |
| 5:55pm, 6:25pm, 7:15pm | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |
| 7:30pm - 11:30pm | Working session at the dorm and/or coffee shops |
| Friday, July 2 |  |
| 7:00am - 8:00am | Breakfast at Foothill dining facility |
| 7:40am, 8:10am, 8:40am, 9:10am | Ride bus to MSRI |
| 9:30am - 10:20am | Dokchitser's student presentations |
| 10:30am - 11:50pm | Greenberg's student presentations |
| 12:00pm - 2:00pm | Lunch at MSRI |
| 2:00pm - 2:50pm | Stein/Weinstein's student presentations |
| 3:00pm -3:50pm | Wuthrich's student presentations |
| 4:00pm - 4:30pm | Cremona students (part 2) |
| $4: 55 \mathrm{pm}, 5: 25 \mathrm{pm}, 5: 55 \mathrm{pm}, 6: 25 \mathrm{pm}, 7: 15 \mathrm{pm}$ | Bus down hill |
| 5:30pm - 7:00pm | Dinner at Foothill dining facility |

