

# Amplitudes 2024

| Time (ET)        | Monday, Jun 10                               | Tuesday, Jun 11                      | Wednesday, Jun 12   | Thursday, Jun 13      | Friday, Jun 14 |  |  |
|------------------|--|--------------------------------------|---|-----------------------|----------------|--|--|
| 7:30 - 8:00 AM   |  |                                      |   |                       |                |  |  |
| 8:00 - 8:45      | Registration                                 | Rider breakfast and buses            |   |                       |                |  |  |
| 8:45 - 9:00      | Welcome:<br>David Nirenberg                  |                                      |   |                       |                |  |  |
|                  | Chair: Bourjaily                             | Chair: Del Duca                      | Chair: Trnka  | Chair: Damgaard       | Chair: Krasnov |  |  |
| 9:00 - 9:45      | Lorenzo Tancredi                             | Ian Moutt                            | Bernd Sturmfels   | Zvi Bern              | Kevin Costello |  |  |
| 9:45 - 10:15     | Samuel Abreu                                 | George Sterman                       | Lauren Williams   | Stefano De Angelis    | Mina Himwich   |  |  |
| 10:15 - 10:45    | Federica Devoto                              | Natalia Toro                         | Carolina Figueiredo   | Lucile Cangemi        | Diksha Jain    |  |  |
| 10:45 - 11:30    | ————— <i>coffee break</i> —————              |                                      |   |                       |                |  |  |
|                  | Chair: Mogull                                | Chair: Peraro                        | Chair: Johansson  | Chair: Heissenberg    | Chair: Dixon   |  |  |
| 11:30 - 12:00 PM | Renata Kallosh                               | Yael Shadmi                          | Hayden Lee  | David Kosower         | Yifei He       |  |  |
| 12:00 - 12:30    | Zahra Zahraee                                | Xiaofeng Xu                          | Aidan Herderschee   | Mikhail Ivanov        | Mathieu Giroux |  |  |
| 12:30 - 1:00     | Christian Copetti                            | Franziska Porkert                    | Mariana Carrillo González   | Alessandra Buonanno   | Juan Maldacena |  |  |
| 1:00 - 2:15      | ————— <i>lunch break</i> (Simons Hall) ————— |                                      |   |                       |                |  |  |
|                  | Chair: Gardi                                 | Chair: Salvatori                     | Chair: Roiban   | Chair: Parra-Martinez |                |  |  |
| 2:15 - 3:00      | François Charton                             | Iain Stewart                         | Stephen Sharpe  | Oliver Schlotterer    |                |  |  |
| 3:00 - 3:30      | Chiara Signorile-Signorile                   | Andrew McLeod                        | Marcus Spradlin   | Tobias Hansen         |                |  |  |
| 3:30 - 4:00      | ————— <i>tea break</i> —————                 |                                      |   |                       |                |  |  |
| 4:00 - 4:15      | Chairs: Hannesdottir & Mizera                |                                      |   |                       |                |  |  |
| 4:15 - 4:30      | Group photo                                  | Chair: Spiering                      | Women+ in Amplitudes (Rubenstein Commons)   |                       |                |  |  |
| 4:30 - 5:00      | Welcome Reception (Rubenstein Commons)       | Shruti Paranjape                     | Gong show   |                       |                |  |  |
| 5:00 - 5:30      |  | Johannes Henn                        |   |                       |                |  |  |
| 5:30 - 6:00      |  | AMIAS Reception (Rubenstein Commons) |   |                       |                |  |  |
| 6:00 - 6:30      |  |                                      |   |                       |                |  |  |
| 6:30 - 7:30      | Rider buses                                  |                                      | Conference dinner (Simons Hall)   | Rider buses           |                |  |  |
| 7:30 - 8:30      | Rider dinner                                 |                                      | Panel discussion:<br>Nima Arkani-Hamed, Lance Dixon, Graham Farmelo, Rachel Rosen | Rider dinner          |                |  |  |
|                  | Rider bus                                    |                                      |   |                       |                |  |  |

| First name | Last name         | Talk title  |
|------------|-------------------|---|
| Samuel     | Abreu             | Two-loop integrals for the production of two heavy bosons and a jet at the LHC              |
| Zvi        | Bern              | Amplitudes and gravitational waves (Review talk)  |
| Alessandra | Buonanno          | Gravitational-Wave Astronomy: Post-Minkowskian Theory Meets the Effective-One-Body Approach |
| Lucile     | Cangemi           | From Quantum to Classical Scattering of Kerr Black Holes                                    |
| Mariana    | Carrillo González | Self-dual cosmology and the color-kinematics duality  |
| Francois   | Charton           | Machine learning the bootstrapped amplitudes of three gluon form factors (Review talk)      |
| Christian  | Copetti           | Categorical Symmetries and 1+1d Scattering Amplitudes                                       |
| Kevin      | Costello          | Bootstrapping amplitudes using chiral algebras (Review talk)                                |
| Stefano    | De Angelis        | From Scattering Amplitudes to General Relativity: the Gravitational Waveform                |
| Federica   | Devoto            | Five parton scattering in the high energy limit   |
| Carolina   | Figueiredo        | Real World Amplitudes from Curves on Surfaces   |
| Mathieu    | Giroux            | Recursive Landau analysis   |

|           |                     |  |               |
|-----------|---------------------|--|---------------|
| Tobias    | Hansen              | AdS string amplitudes and their high energy limit  |               |
| Yifei     | He                  | Gauge Theory Bootstrap: Pion amplitudes and low energy parameters  |               |
| Johannes  | Henn                | Positivity properties of scattering amplitudes   |               |
| Aidan     | Herderschee         | Summation-by-Parts, Master Functions and Difference Equations for Loop Witten Diagrams                         |               |
| Mina      | Himwich             | $w(1+\infty)$ Symmetry in 4D Gravitational Scattering  |               |
| Mikhail   | Ivanov              | Loops in the Sky: Recent Applications of Amplitude Methods in Galaxy Clustering and Gravitational Wave Physics |               |
| Diksha    | Jain                | The S-matrix and boundary correlators in flat space  |               |
| Renata    | Kallosh             | Enhanced Duality in 4D Supergravity  |               |
| David     | Kosower             | Finite Feynman Integrals   |               |
| Hayden    | Lee                 | Kinematic Flow and the Emergence of Time   |               |
| Juan      | Maldacena           | Three point amplitudes from the Matrix model approach to eleven dimensional M-theory                           |               |
| Andrew    | McLeod              | Minimal Cuts and Genealogical Constraints on Feynman Integrals   |               |
| Ian       | Moult               | Conformal Colliders meet the LHC   | (Review talk) |
| Shruti    | Paranjape           | Hidden Zeros and the Double Copy   |               |
| Franziska | Porkert             | The 5-mass kite integral family on two tori  |               |
| Oliver    | Schlotterer         | Recent developments in string amplitudes   | (Review talk) |
| Yael      | Shadmi              | Amplitudes for SM EFTs   |               |
| Stephen   | Sharpe              | Multiparticle scattering amplitudes from lattice QCD   | (Review talk) |
| Chiara    | Signorile-Signorile | The dark side of precision calculations: subtractions  |               |
| Marcus    | Spradlin            | Bespoke Unitarity and Colored Yukawa Theory  |               |
| George    | Sterman             | Momentum-space locality in factorized amplitudes and cross sections  |               |
| Iain      | Stewart             | Soft Collinear Effective Theory & Collider Physics   | (Review talk) |
| Bernd     | Sturmfels           | Minimal kinematics   | (Review talk) |
| Lorenzo   | Tancredi            | Scattering Amplitudes and Feynman Integrals for collider physics   | (Review talk) |
| Natalia   | Toro                | Massless interactions beyond the helicity lamppost: Making sense of continuous spin                            |               |
| Lauren    | Williams            | The magic number conjecture for the $m=2$ amplituhedron and Parke-Taylor identities                            |               |
| Xiaofeng  | Xu                  | Symbol letters of Feynman integrals from Gram determinants   |               |
| Zahra     | Zahraee             | Bootstrapping Planar $N=4$ SYM at Finite Coupling  |               |

(Final)