

School on Particle Physics in the LHC Era

Programme

FIRST WEEK: April 1 to 6

| Monday, 1 April | |
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| 8:00 – 9:00 | Registration |
| 9:00 – 10:30 | Quigg I |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | de Florian I |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Quigg II |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:00 | Discussion |
| 17:30 – 19:30 | Exercises and Projects |
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| Tuesday, 2 April | |
| 9:00 – 10:30 | Quigg III |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | De Florian II |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Quigg IV |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:00 | Discussion |
| 17:30 – 19:30 | Exercises and Projects |
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| Wednesday, 3 April | |
| 9:00 – 10:30 | Quigg V |
| 10:30 – 11:00 | Coffee break |

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| 11:00 – 12:30 | De Florian III |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Discussion |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:30 | Lykken I |
| 17:30 – 19:30 | Exercises and Projects |

Thursday, 4 April

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| 9:00 – 10:30 | Lykken II |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | Pontón I |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Lykken III |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:00 | Discussion |
| 17:30 – 19:30 | Exercises and Projects |

Friday, 5 April

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| 9:00 – 10:30 | Lykken IV |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | Pontón II |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Lykken V |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:00 | Discussion |
| 17:30 – 19:30 | Exercises and Projects |

Saturday, 6 April

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| 9:00 – 10:30 | Pontón III |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | Seminar Deandrea Cacciapaglia |
| 12:30 - | Free |
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| SECOND WEEK: April 8 to 12 | |
| Monday, 8 April | |
| 9:00 – 10:30 | Pontón IV |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | Belyaev I |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Carena I |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:00 | Discussion |
| 17:30 – 19:30 | Exercises and Projects |
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| Tuesday, 9 April | |
| 9:00 – 10:30 | Pontón V |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | Belyaev II |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Carena II |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:00 | Discussion |
| 17:30 – 19:30 | Exercises and Projects |
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| Wednesday, 10 April | |
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| 9:00 – 10:30 | Carena III |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | Belyaev III |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Chacko I |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:00 | Discussion |
| 17:30 – 19:30 | Exercises and Projects |
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| Thursday, 11 April | |
| 9:00 – 10:30 | Chacko II |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | Belyaev IV |
| 12:30 – 14:00 | Lunch |
| 14:00 – 15:30 | Chacko III |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 17:00 | Discussion |
| 17:30 – 19:30 | Exercises and Projects |
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| Friday, 12 April | |
| 9:00 – 10:30 | Chacko IV |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:30 | Belyaev V |
| 12:30 – 14:00 | Lunch |
| Presentations | |
| 14:00 – 14:15 | Lucia Duarte: "Top quark decay in A2HDM" |
| 14:15 – 14:30 | Javier Orduz: A SIMPLE CALCULATION FOR HIGGS AND Z |
| 14:30 – 14:45 | Alfredo Herrera Aguilar: "Corrections to Newton's law in a tachyonic braneworld with de Sitter symmetry" |

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| 14:45 – 15:00 | Seng Pei Liew: “Axino dark matter with R-parity violation and 130 GeV gamma-ray line” |
| 15:00 – 15:15 | Daniel Busbridge: “ Is supersoft supersymmetry breaking supernatural?” |
| 15:15 – 15:30 | William Torres: “Rational Contribution to One-loop Gluon Amplitudes” |
| 15:30 – 15:45 | David Stone: "Strong matrix element enhancement in light, flavored B-meson decays" |
| 15:45 – 16:15 | Coffee break |
| 16:15 – 17:15 | DISCUSSION |

Lectures:

Chris Quigg – Standard Model

Daniel de Florian – QCD

Joe Lykken – Collider Physics

Eduardo Pontón – Extra dimensions

Marcela Carena – Introduction to SUSY

Zackaria Chacko – Little Higgs, SUSY breaking

Sasha Belyaev – Numerical tools for the LHC