## **UNIVERSITY OF SUSSEX DEPARTMENT OF PHYSICS AND ASTRONOMY MS**C IN PARTICLE PHYSICS MODULE CHOICES FOR THEORETICAL PARTICLE PHYSICS 2024-25

- Email this form to mps\_pqtoffice@sussex.ac.uk by Friday 20th September 2024 at noon. If at any point you wish to change a module you must complete a new version of this form. Please note that the Department reserves the right to withdraw any of these modules.

| Student's first name  Year of Entry  |   |                 |                   |           |
|--|---|-----------------|-------------------|-----------|
| Student's last name  |   |                 |                   |           |
| Code   | Modules   |                 | Credit<br>(Level) | Tick here |
| Semester One You will take the following core modules:   |   |                 |                   |           |
| 877F3  | Quantum Field Theory (Core)   |                 | 15 (7)            | V         |
| Semester Two The following modules are recommended:  |   |                 |                   |           |
| 882F3  | Advanced Quantum Field Theory (Semester Two) PRE                      | REQUISITE 877F3 | 15 (7)            |           |
| 901F3  | Beyond the Standard Model (Semester Two) PRE REQU                     | JISITE 877F3    | 15 (7)            |           |
| Plus select THREE of the following recommended options. You should have selected a total of FIVE optional 15-credit modules for the year.  |   |                 |                   |           |
| 890F3  | Data Analysis Techniques (Semester One)                               |                 | 15 (7)            |           |
| F3221<br>900F3   | Nuclear and Particle Physics (Semester One)  Cosmology (Semester One) |                 | 15 (6)<br>15 (7)  |           |
| 900F3<br>881F3   | General Relativity (Semester One)                                     |                 | 15 (7)            |           |
| 823G5  | Programming through Python  |                 | 15 (7)            |           |
| 895F3  | Quantum Optics and Quantum Information (Semester On                   | ne)             | 15 (7)            |           |
| 878F3  | Symmetry and the Standard Model (Semester One)                        |                 | 15 (7)            |           |
| F3214  | Particle Physics (Semester Two)                                       |                 | 15 (6)            |           |
| 894F3  | Frontiers in Particle Physics (Semester Two)                          |                 | 15 (7)            |           |
| 880F3  | Particle Physics Detector Technology (Semester Two)                   |                 | 15 (7)            |           |
| 879F3  | Advanced Cosmology (Semester Two)                                     |                 | 15 (7)            |           |
| 865G1  | Monte Carlo Simulations (Semester Two)                                |                 | 15 (7)            |           |
| Year   |   |                 |                   |           |
| 919F3  | MSc Project Research Skills   |                 | 30 (7)            | V         |
| 920F3  | MSc Project P&A   |                 | 60 (7)            | V         |
| Note: A recommended module can be exchanged for a different module if the supervisor considers it appropriate. If the substitute module is given by a different department then the course convenor must sign off on the module (in addition to the supervisor).  Six modules (including the two core modules) should be taken over two semesters, either four in semester one and two in semester two or three in each of the semesters. No more than 30 credits to be taken at level 6. Credits must total 180.  You will not be allowed to change modules after week 2 of the semester that the module is given.  Supervisor/Convenor's Signature |   |                 |                   |           |
| Declaration  |   |                 |                   |           |
| <ul> <li>I understand the terms 'Collusion', 'Plagiarism' and 'Fabrication of Results' as defined in the Examination &amp; Assessment Handbook at <a href="http://www.sussex.ac.uk/adqe/standards/examsandassessment">http://www.sussex.ac.uk/adqe/standards/examsandassessment</a></li> <li>I declare that all work submitted for assessment will be solely my work and that reference to the work of others will be properly acknowledged by me.</li> </ul>  |   |                 |                   |           |
| Student's Signature  |   |                 |                   |           |
| I agree that this student can take the following module/s that are not on the 'recommended' list above.  |   |                 |                   |           |
| Supervisor's Signature   |   |                 |                   |           |
| Entered by: Date:  |   |                 |                   |           |
| o. ou by.  |   |                 |                   |           |