

5.00 credits

27.0 h + 3.0 h

Q1

|                             |                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Teacher(s)                  | Bruno Giacomo ;de Wasseige Gwenhaël ;Janquart Justin ;Lemaitre Vincent ;                                                                                                                                                                                                                                                                                                                       |
| Language :                  | English                                                                                                                                                                                                                                                                                                                                                                                        |
| Place of the course         | Louvain-la-Neuve                                                                                                                                                                                                                                                                                                                                                                               |
| Prerequisites               | go to LPHYS2336                                                                                                                                                                                                                                                                                                                                                                                |
| Main themes                 | go to LPHYS2336                                                                                                                                                                                                                                                                                                                                                                                |
| Learning outcomes           | <b>At the end of this learning unit, the student is able to :</b><br>go to LPHYS2336                                                                                                                                                                                                                                                                                                           |
| Evaluation methods          | Evaluation of personal projects reports.<br>Oral exam, partly based on the projects reports.                                                                                                                                                                                                                                                                                                   |
| Teaching methods            | Lectures in class.<br>Personal projects. Students can choose the subject among a list proposed by the teachers.<br>Reading portfolio for personal study.                                                                                                                                                                                                                                       |
| Content                     | This course consists of 2 partims, each worth 2.5 credits, thus totalling 5 credits: "Astroparticle Physics" and "Gravitational-wave Physics".<br>PARTIM "Astroparticle Physics" (2.5 credits): Theory, instrumentation and detection methods used in astroparticle physics.<br>PARTIM "Gravitational-wave Physics" (2.5 credits): theory and detection methods in gravitational-wave physics. |
| Bibliography                | Des diapositives de cours et des documents supplémentaires sur les sujets traités sont disponibles sur le site MoodleUCL de l'unité d'enseignement.<br>Course slides and additional documents on the subjects addressed are available on the MoodleUCL website of the teaching unit.                                                                                                           |
| Faculty or entity in charge | PHYS                                                                                                                                                                                                                                                                                                                                                                                           |

| Programmes containing this learning unit (UE) |                         |         |              |                                                                                     |
|-----------------------------------------------|-------------------------|---------|--------------|-------------------------------------------------------------------------------------|
| Program title                                 | Acronym                 | Credits | Prerequisite | Learning outcomes                                                                   |
| Master [60] in Physics                        | <a href="#">PHYS2M1</a> | 5       |              |  |
| Master [120] in Physics                       | <a href="#">PHYS2M</a>  | 5       |              |  |