

# Lecture Plan (Dates, subjects (prel.))

## Vorlesung Teilchendetektoren

WS 2015/16

|                        |  | VL<br>Std. | Bilanz<br>Std. |
|------------------------|--|------------|----------------|
| 22. Okt.               | Introduction                                 | 2          |                |
| 23. Okt.               |  |            | -1             |
| 29. Okt.               | Interaction of charged particles with matter | 2          |                |
| 30. Okt.               | Interaction of charged particles with matter | 2          | 1              |
| 05. Nov.               | Interaction of neutral particles with matter | 2          |                |
| 06. Nov.               |  |            | -1             |
| 12. Nov.               | Ionisation measurements                      | 2          |                |
| 13. Nov.               | Ionisation measurements                      | 2          | 1              |
| 19. Nov.               | Tracking detectors I (MWPC, driftchamber)    | 2          |                |
| 20. Nov.               |  |            | -1             |
| 26. Nov.               | Tracking detectors II (driftchamber, TPC)    | 2          |                |
| 27. Nov.               | Tracking detectors III (Silicon detectors)   | 2          | 1              |
| 03. Dez.               | Tracking detectors IV (Silicon detectors)    | 2          |                |
| 04. Dez.               |  |            | -1             |
| 10. Dez.               | Measurement of particle momenta, muon        | 2          |                |
| 11. Dez.               | Photomultipliers                             | 2          | 1              |
| 17. Dez.               | Scintillators, Time measurement              | 2          |                |
| 18. Dez.               |  | 2          | 1              |
| <b>Weihnachtspause</b> |  |            |                |

|              |   |           |          |
|--------------|---|-----------|----------|
| 07. Jan      | Energy measurement in calorimeters I          | 2         |          |
| 08. Jan      | Energy measurement in calorimeters II         | 2         | 1        |
| 14. Jan      | Energy measurement in calorimeters III        | 2         |          |
| 15. Jan      |   |           | -1       |
| 21. Jan      | Particle Identification, Cherenkov detectors  | 2         |          |
| 22. Jan      | Particle Identification, Transition radiation | 2         | 1        |
| 28. Jan      | Detector systems                              | 2         |          |
| 29. Jan      |   |           | -1       |
| 04. Feb.     |   |           | -2       |
| 05. Feb.     | ATLAS and CMS detectors                       | 2         | 1        |
| 11. Feb      | Applications in medicine and other areas      | 2         |          |
| 12. Feb      | Klausur                                       | 1         |          |
| <b>Summe</b> |   | <b>45</b> | <b>0</b> |