

Nuclear and Particle Physics

Module No.: MN-P-SP-Nuc, MN-P-PN-Nuc, MN-P-WaMa

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Course: Neutron Physics

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Category	Type	Language	Teaching Hours	CP	Semester
Specialized Course	Lecture	English	2	3	tba

Requirements for participation:

Nuclear Physics I

Type of module examinations:

One oral examination at the end of the module

Duration of the course:

1 semester

Aims of the course:

Introduction to the physics of and with neutrons.

Contents of the course:

- The neutron as a fundamental particle.
- Neutron sources
- Neutron detectors
- Neutron optics
- Nuclear reactions with neutrons
- Neutron capture in astrophysics

Recommended literature:

J. Byrne Neutrons, Nuclei and Matter, Institute of Physics Publishing 1994, ISBN 0 7503 0366 2 PBK