

Nuclear and Particle Physics

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

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Course: Selected Topics of Modern Nuclear Physics

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

Requirements for participation:

Basic Knowledge in Nuclear Physics

Type of module examinations:

Part of courses for area of specialisation Nuclear and Particle Physics, separate oral examination is possible exceptionally.

Duration of the course:

1 semester

Aims of the course:

Study of selected topics related to nuclear physics based on radioactive ion beams. The students should participate actively in the course.

Contents of the course:

- production of radioactive ion beams
- mass measurements
- halo nuclei
- structure of exotic nuclei
- shapes and shape coexistence
- advanced detection techniques

Recommended literature:

The course is based on recent review articles and up-to-date publications in various journals.