

# Nuclear and Particle Physics

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

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## Course: Theoretical Nuclear Physics II

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

### Requirements for participation:

Theoretical 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 theoretical description of nuclear structure. In part II emphasis is laid on second quantisation, dynamical symmetries and the interacting boson model.

### Contents of the course:

- Second quantization
- The Interacting Boson Model-I
- The algebraic approach: dynamical symmetries
- The dynamical symmetries of the IBM-1

### Recommended literature:

A script will be distributed during the course.