

**Universidad Autónoma de Madrid
Many-body Theories in Nuclear Physics.**

In person	Monday 22/02/2027	Tuesday 23/02/2027	Wednesday 24/02/2027	Thursday 25/02/2027	Friday 26/02/2027
09:30-11:30	General Overview	Mean Field	Beyond mean field	Beyond mean field	Interacting Shell Model
11:30-12:00	Break	Break	Break	Break	Break
12:00-13:00	Second Quantization	Interacting Shell Model	Beyond mean field	Interacting Shell Model	Interacting Shell Model
13:00-13:30	tutoring	tutoring	tutoring	tutoring	tutoring
13:30-15:00			Break	Break	
15:00-18:00			Computer session	Computer session	

On line	Monday 01/03/2027	Tuesday 02/03/2027	Wednesday 03/03/2027	Thursday 04/03/2027	Friday 05/03/2027
09:30-11:30	Computer session	Computer session	Computer session		
11:30-12:30	Break	Break	Break		
12:30-13:30	Computer session	Computer session	Computer session		
13:30-14:00	tutoring	tutoring	tutoring		

*This schedule is tentative and may be subject to slight changes.

Lectures of the first week will be held at the Lecture Room 300. Module 15. Faculty of Science. Universidad Autónoma de Madrid (Department of Theoretical Physics)

(http://www.uam.es/ss/Satellite/FisicaTeorica/es/1234888474024/contenidoFinal/Llegar_al_Dpto..htm)).

On-line lectures of the second week will be held in the virtual room (to be announced)

Lecturers:

- Samuel Giuliani (UAM) (samuel.giuliani@uam.es)
- Alfredo Poves (UAM) (alfredo.poves@uam.es)
- Luis Robledo (UAM) (luis.robledo@uam.es)

Bibliography (textbooks):

- *From Nucleons to Nucleus*. J. Suhonen.
- *The Nuclear Shell Model*. K. Heyde.
- *Fundamentals of Nuclear Models*. D. J. Rowe, J. L. Wood.
- *The nuclear many-body problem*. P. Ring, P. Schuck.