

The master program has an structure of 60 ECTS (24 of compulsory courses, 21 of elective courses and 15 corresponding to the Master Thesis)

The structure is as follows:

3 elective courses are intended to balance the background of the students (most likely those students graduated in Chemistry or Engineering).

- Mathematical methods for nanoscience
- Classical Electrodynamics
- Fundamentals of quantum mechanics

The core of the master program is composed by all the compulsory courses:

- Fundamentals of nanoscale characterization
- Experimental techniques I: structural characterization
- Experimental techniques II: spectroscopies
- Low dimensional systems and nanostructures
- Soft matter and nanostructured materials
- Nanostructural properties
- Modeling and molecular dynamics simulations at the nanoscale
- From nanoscience to nanotechnology

plus two elective courses:

- Nanoscience: a historical perspective
- Nanotechnology-oriented research activities: seminar series

Other 2 elective courses are intended to complement the knowledge in basic topics.

- Introduction to Material science
- Fundamentals of solid-state physics

4 elective advanced courses will cover rather specific topics in different areas

- Advanced nano-scale characterization techniques
- Advanced theoretical methods in nanoscience
- Advanced topics in nanomaterials
- Dynamics of complex materials

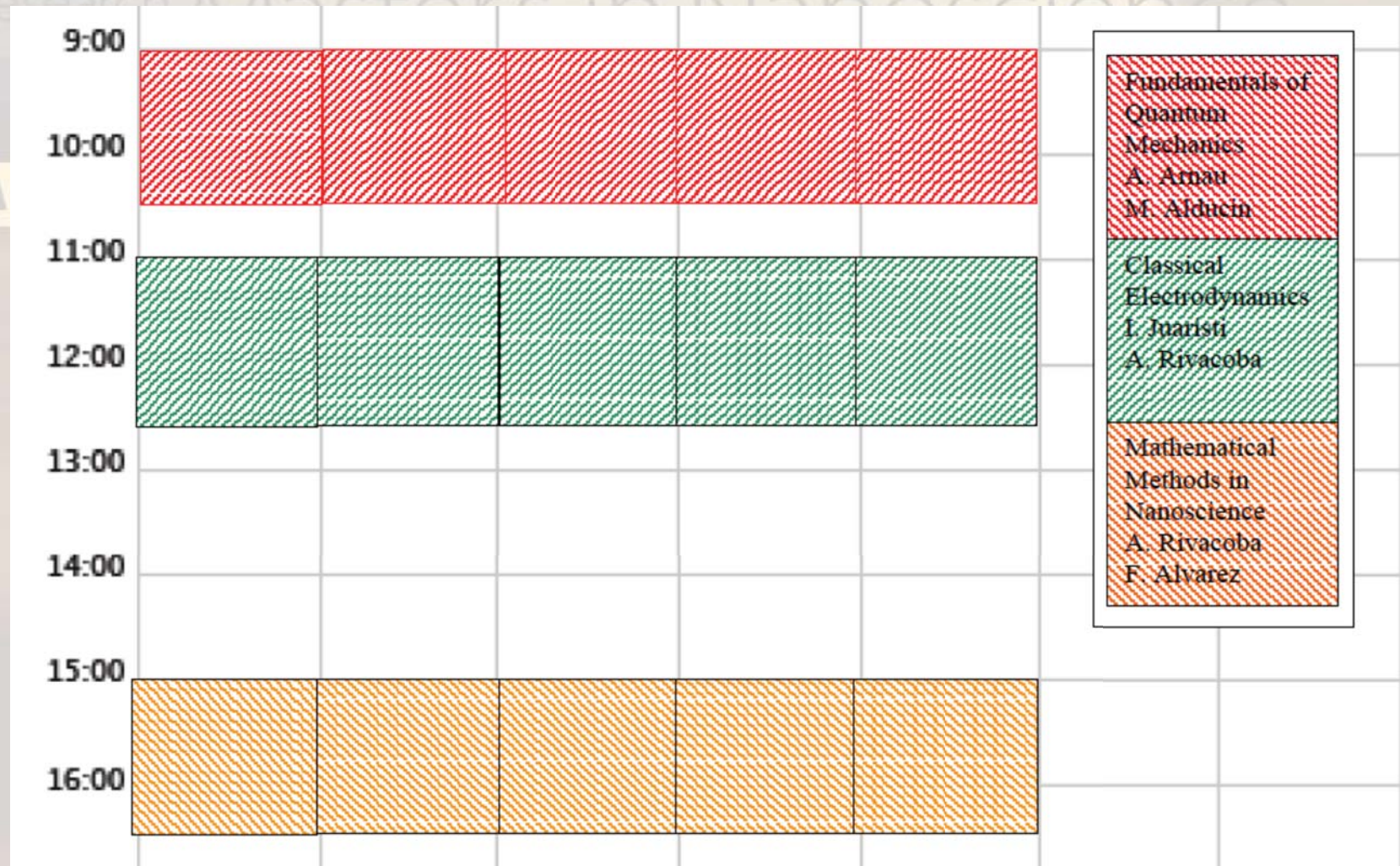
Finally, there is an elective practical course:

- Introduction to scientific research

where the student is going to follow a training research activity in one of the current lines developed by the research groups participating in the master.

Lectures schedule:

FIRST PERIOD: 19 SEPT.- 17 OCT. 2011



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ORGANIZERS



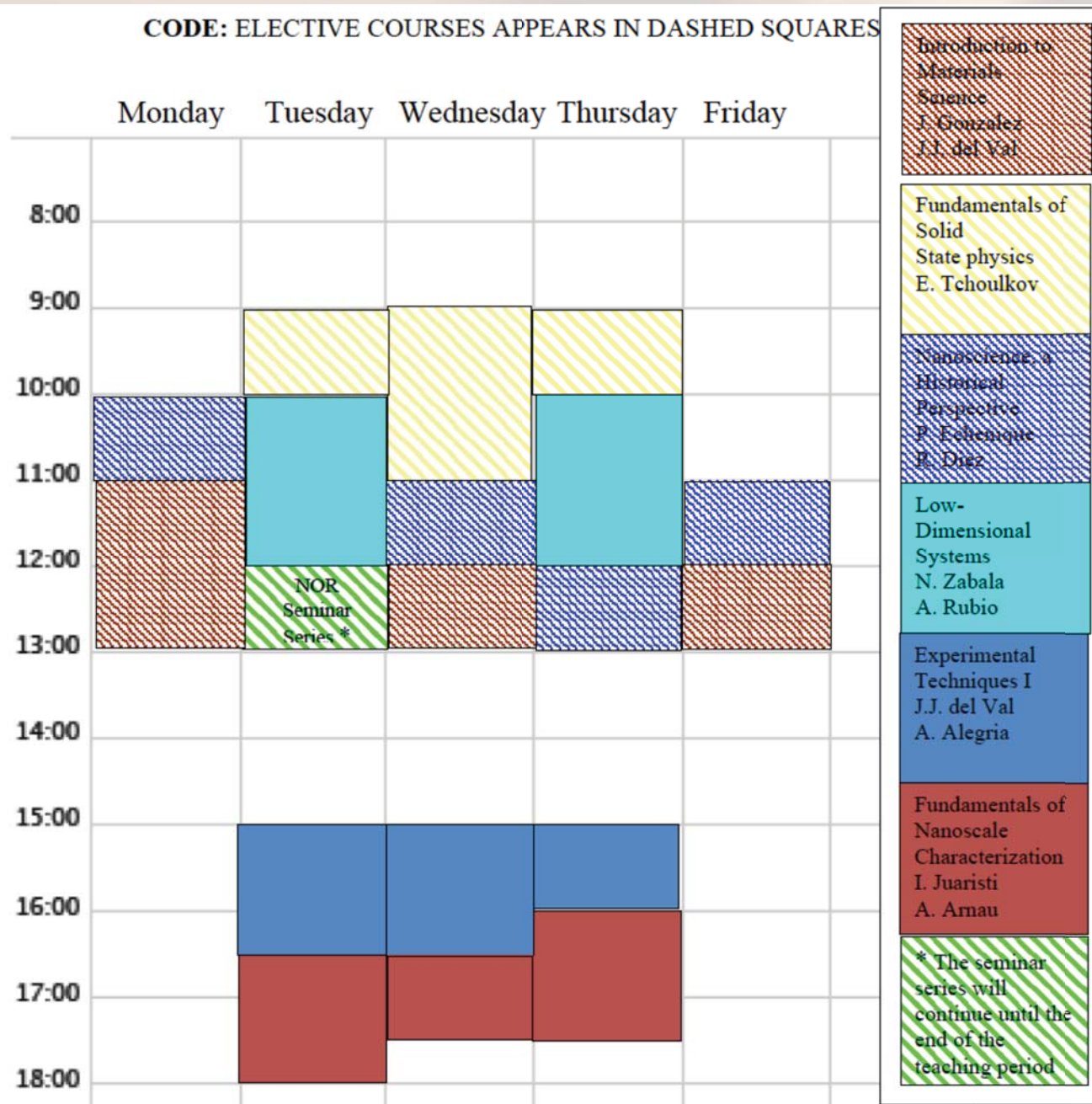
COLLABORATORS



Lectures schedule:

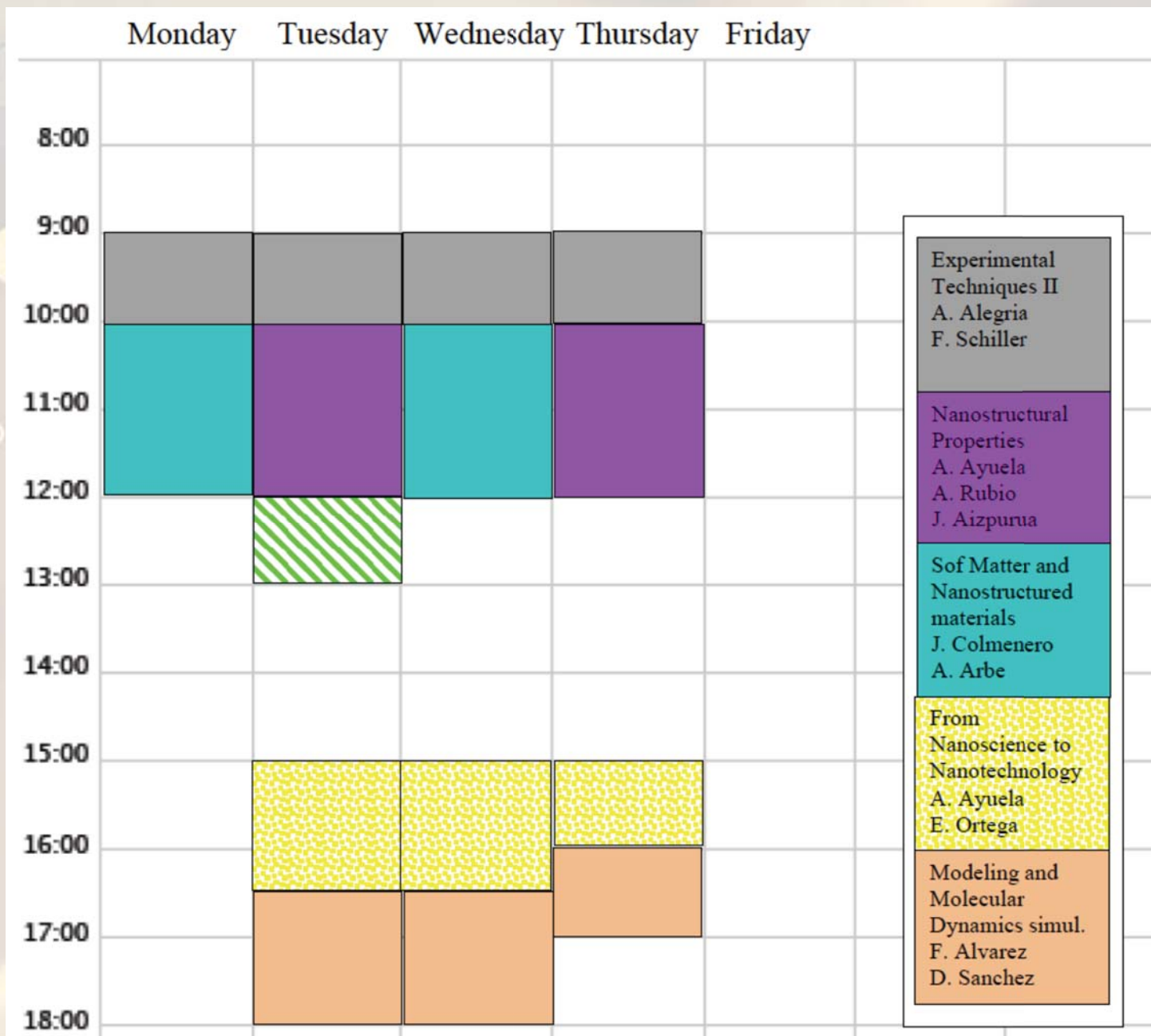
SECOND PERIOD: 24 OCT. - 22 DEC. 2011

CODE: ELECTIVE COURSES APPEARS IN DASHED SQUARES



Lectures schedule:

THIRD PERIOD: 6 FEB. - 30 MARCH 2012



Lectures schedule: FOURTH PERIOD: 2 MAY - 15 JUNE 2012

