Joint Experimentation and Analysis Session

Academic Year: (2023 / 2024) **Review date: 14-06-2022**

Department assigned to the subject: Physics Department

Coordinating teacher: SANCHEZ FERNANDEZ, LUIS RAUL

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

First year master courses, mainly basic plasma physics, experimental techniques (plasmas, materials and nuclear physics) and computational physics.

OBJECTIVES

Research in the Tokamak department is pursued in topics that are directly linked to the international long-term efforts into mastering thermonuclear fusion. Fusion presents environmentally acceptable and practically inexhaustible energy source for future generations. Experimental research in the department is based on use of the national facility tokamak COMPASS that full started operation in 2012.

DESCRIPTION OF CONTENTS: PROGRAMME

This activity is taken simultaneously by all second-year master students at the Institute for Plasma Physics in Prague, Czech Republic, where the CASTOR tokamak is housed. Students will have first-hand experience in the design, control, operation and diagnosis of a mid-size tokamak, guided by the IPP scientific staff.

ASSESSMENT SYSTEM

Oral presentation in front of a committee made of the experiment supervisors and lecturers of the master. 30min are given to each student, divided in 20min talk + 10min questions.

* Guidelines for talk preparation:

They are expected to present:

- the subject of the work, its scientific relevance for fusion
- the description of the method that has been used to study this subject, results
- what would you propose to go further into the subject (follow-up?)

The final mark is figured out from the quality of the presentation plus the ability of the student to answer questions from the committee.

% end-of-term-examination:	100
% of continuous assessment (assigments, laboratory, practicals…):	0

BASIC BIBLIOGRAPHY

- IPP supervisor Documentation specifically provided., N/A, current