

## Cycle of lectures for the students of DOCTORAL SCHOOL GEOPLANET

Title : Basic Space Physics

Size: 30 units (45 minutes each) in 15 blocs 2 units each

Lecturer: Prof. dr hab. Jan Błęcki

Lectures will be given online.

1. The Earth in the Solar System and in the Universe /2units.
2. Earth's atmosphere -its structure and dynamics / 2u.
4. Plasma - definition and fundamental features / 6u.
5. The Sun -its structure, activity and Solar Wind /4u.
6. Magnetic Field of the Earth /2u.
7. The Ionosphere - origin, structure and variability/2u.
8. Propagation of the electromagnetic waves in the ionosphere and influence of the disturbances in space on it /2u.
9. The Magnetosphere - creation, structure and processes within it /2u.
10. Disturbances in the near Earth space- their sources and physical processes responsible for their /2u.
11. Overall picture of the Solar-Earth connections- Space Weather /2u.
12. Cosmic rays - basic information /2u.
13. Influence of the disturbances in the space around Earth on the technical constructions in space and on the ground and on the people /2u.