



PREDOCTORAL POSITION IN APPLIED MAGNETISM

The Space Magnetism Area – INTA (Spain) is offering a 4 years duration PhD grant within the frame of its Planetary Magnetism Unit.

The Planetary Magnetism Unit, part of the Space Magnetism Area of INTA, is looking for motivated candidates with a Masters degree in Physics (preferred) or Engineering (Telecommunication or Civil engineering oriented towards instrumentation) or similar background willing to work on space instrumentation topic.

The project will be developed at the National Institute of Aerospace Technology (INTA - Instituto Nacional de Técnica Aeroespacial), a Public Research Organization that depends on the Spanish Ministry of Defense. INTA is responsible of performing scientific research activities and prototype development, as well as providing technological services to companies in the industry, universities and other institutions. INTA specializes dually in technological research and development in aerospace, aeronautics, hydrodynamics, and in security and defense technologies.

The grant is to be developed at the Planetary Magnetism Unit part of the Space Magnetism Area of INTA. The Space Magnetism Area, leads and develops international projects such as AMR, a project for the development of a magnetometer to be placed on the surface of Mars; or MAGMA, a project for the adaptation of payload and platform, which has mounted vector magnetometers on board RPAs, and performs the exploitation of the scientific operation of the instruments. The activities of the Planetary Magnetism Unit include conception, design, development, optimization and calibration of magnetic instrumentation for space applications such as planetary exploration. This Unit also maintains a line of research and development of new instrumentation to improve the compositional and structural interpretation of surface rocks in planetary exploration missions. In this line, the Unit participates in campaigns of terrestrial analogs of Mars and the Moon.

The proposed tasks for this grant are framed within this line and are specifically focused on: i) Construction of instrumentation based on unit designs; ii) Calibration methods; iii) Optimization of instruments; iv) Investigation of meteorites with the developed instrumentation; v) Physical interpretation of complex susceptibility measures.

The candidates interested in this offer are welcome to send an email attaching their CV and/or any doubts concerning the offer to Marina Diaz Michelena (diazma@inta.es). The position is open until 22nd of October 2021, but can be extended if no suitable candidate is found. In the process, equal treatment will be ensured for all candidates (despite their gender, race, nationality, etc). The funding will be granted once the candidate is selected. All activities will be hosted at the INTA facilities, in Torrejón de Ardoz, Madrid.

