

Position in the frame of the Research and training network MAGE

This is a Research and Training Network of the EU, MAGE (MArs Geophysical European network)
6 months position for a postdoc

The MAGE project is a European research and training project involving exchange of postdocs. The candidates must be from the EU outside Belgium and must have been working or studying at least 2 years outside Belgium. The salaries are the official salaries of postdocs of the host country (Belgium), plus relocation costs, travel and networking fees. The MAGE postdoc at ROB will work in particular on 'orbital dynamics and Interior/atmosphere interaction'.

This subject comprises the complete description of the orbital dynamics of the planet, including tides, precession, nutation, and their relationship with the internal structure. The atmospheric circulation and the impact of mass exchange between the polar caps and atmosphere on the rotation of Mars is also a topic of interest.

The main study subject will be chosen as a function of the candidate background.

Please send before the end of June 2005 a CV and a motivation letter (which should include your date of availability) to

Prof. Veronique Dehant
Veronique.Dehant@oma.be
Royal Observatory of Belgium
3 avenue Circulaire
B 1180 Brussels
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Position on the Action 1 proposal

The proposal is a research action that has been proposed and accepted by the authorities (Belspo) for hiring a postdoc for 2 years and 4 months (starting in September up to end 2007)

The project aims at studying the effect of the geophysical fluid layers on planetary rotation. As the ROB has a long history of studying the Earth rotation, the Earth rotation study is part of the research, even if the rotation of other bodies, like Mars, Mercury or Europa, can be also investigated.

The following topics have been identified as relevant in the frame of this contract:

- Study of the core-mantle coupling and its effects on the Earth rotation
- Modeling of the high frequency core flow and its effects on Earth rotation
- Atmospheric, oceanic, hydrologic effect on Earth rotation

- Effect of the external fluid layers on the nutation of the Earth
- Study of VLBI nutation residuals, and their interpretation in terms of physics of the Earth interior
- Effect of the Mars atmosphere on Mars rotation
- Effect of the Mars core on Mars rotation
- Dynamics of the ocean in Europa and its effect on the rotation of Europa ice shell
- Effect of the core and inner core on Mercury's rotation

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