Deutsches Zentrum
für Luft- und Raumfahrt e.V.
in der Helmholtz-Gemeinschaft

Linder Höhe
D-51147 Köln
Telephone: +49 (0)2203 601-0
Internet: www.dlr.de

DAAD

**Deutscher Akademischer
Austausch Dienst
German Academic Exchange Service**

Kennedyallee 50 – D-53175 Bonn
Telephone: +49 (0)228 882-0
Telefax: +49 (0)228 882 448
E-mail: roehlen@daad.de
Internet: www.daad.de

DLR – DAAD – Fellowships

Fellowship - No. 35

Applicants are invited from Italy

Research Area : Space

Research Topic: Comparative analysis of data processing schemes for near and mid-infrared remote sensing data from planetary surfaces

DLR Institute: Institute for Planetary Research at DLR Berlin-Adlershof

Position: Postdoctoral Fellow

Openings: 1

Job Specification: An increasing number of planetary missions are equipped with mid-infrared imaging spectrometer. The Institute for Planetary Research has scientific participations in several of these instruments and develops with the University of Münster MERTIS – a thermal infrared imaging spectrometer for the ESA/JAXA Mission BepiColombo to Mercury. Furthermore the institute operates the Planetary Emissivity Laboratory (PEL) to study planetary analog materials in the near- and mid-infrared. The task of the applicant is to evaluate and benchmark approaches to analyse hyperspectral data from mid-infrared imaging spectrometer, including verification tests with the PEL. The applicant will develop based on this evaluation a data analysis approach for the MERTIS instrument. The main focus will be on a high degree of automatic processing to cope with the high data volume returned by the MERTIS instrument.

Required Qualification: The candidate should have a strong background in analysis methods for hyperspectral near- and mid-infrared data, including neural network approaches. Several years of experience working with mid-infrared data from planetary surfaces as well as experience in handling and organizing spectral databases are required.

Advantageous Skills:	Very good knowledge on thermal infrared spectrometer on planetary missions, especially PFS on MarsExpress and TES on Mars Global Surveyor
English competence:	Very good
Earliest Start Date:	June 2009 (for 24 months)
Application Deadline:	03/31/2009
Further Information:	**www.dlr.de** **www.daad.de/dlr**