

Europlanet FP7 Proposal role of N2 DWGs

Version: September 18th, 2007 October 31, 2007



I - 5 Scientific themes for FP7

- Giant planets systems as templates of planetary systems (Galileo, Cassini-Huygens, New Horizon, JUNO, Cosmic Vision) DWG1, DWG2, DWG9, DWG7
- Small bodies and origin of the solar system

(Asteroid and comets missions, Dawn, Rosetta, Phobos-Grunt, New-Horizon, Cosmic Vision)

DWG4, DWG9, DWG6

Terrestrial planets and comparative planetology

(strong link to Earth sciences, MEX, VEX, Chandrayaan, Selene, Phoenix, B-C, Aurora programme)

DWG1, DWG2, DWG3, DWG5, DWG6, DWG7, DWG8, DWG9

• « magnetic worlds »: the Sun-planets connection

(Ulysses, all planetary missions, SOHO, Stereo and SOLO, Sentinel, synergies with CLUSTER et al.)

DWG1, DWG2, DWG7

Exoplanets and Other Planetary Systems

(strong link to astrophysics community, COROT, KEPLER, GAIA, Cosmic Vision)

DWG1, DWG2, DWG6, DWG7, DWG9

Each theme will produce an ISSI refereed book + a pan-european outreach publication (Spatium series)



Proposed list of JRA's

JRA-1. Support to space missions science operations and data analysis (J.-P. Lebreton, contact)

- Ephemeris
- Value added and distributed operation tools and services
- Environmental models

N2 participation

- JRA-2. New instrumentations for Earth-based observations in planetary sciences (H. Rucker contact, defined in coordination with other astrophysics-oriented I3's)
- JRA-3. Lab measurements and characterization (O. Dutuit, contact)
 - Chemical reactions
 - Mass spectrometry
 - Spectrometry in gas phases
 - Spectrometry in solids

N2 participation

• JRA-4. Interdisciplinary computational modelling and data analysis (ICM & DA) (M. Khodachenko, S. Miller, N. Krupp, contact)

N2 participation

- JRA-5. Planetary VO and data mining (G. Chanteur, contact)
 - Plasmas
 - Atmospheres
 - Surfaces and interiors
 - Small bodies
 - Techniques

N2 participation

- JRA-6. European Planetary Outreach Laboratory (J.-P. lebreton, contact)
 - Targetted audiences e.g. policy makers
 - Translation and adaptation
 - Pilot projects



Proposed list of TNA's

- TNA-1. Lab measurements and characterization (O. Dutuit, contact)
 - Chemical reactions
 - Mass spectrometry
 - Spectrometry in gas phases
 - Spectrometry in solids
 N2 participation
- TNA-2. Laboratory and fields analogues of planetary environments (M. Grande, contact)
 N2 participation
- TNA-3. European Planetary Science Media Service (J.-P. Lebreton, contact)



Networking activities

5

Community exchange and interaction tools:

- N1. Central Project Management
- N2. Scientific working groups (Norbert KRUPP, Ari-Matti HARRI, contacts) (with wg's adapted to Project structure)
 - All N2 Discipline wg's in support to the IDIS nodes (see matrix)
 - All N2 Discipline WG's support the 5 thematic science themes
 - Ad hoc « tools » working groups ?Organization of WG meetings
- N3. Coordination of Earth-based and Space observations (Helmut RUCKER, Steve MILLER, Maxim KHODACHENKO, contacts)
- N4. Outreach and Media Relations (Jean Pierre LEBRETON, contact)
- N5. Exchange programme (Odile DUTUIT, Karoly SZEGO, contacts)
- N6. Scientific meetings (Manuel GRANDE, Ralf SRAMA, contacts)
 - Continuation of EPSC
 - ISSI workshops, etc.

New activity area t.b.d (M. Grande, contact):

 Nx. Planetary instrumentation technology development N2 participation