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Wuhan University (武汉大学)

China University of Geoscience (Wuhan) (中国地质大学(武汉))

International Association of Planetary Science (国际行星科学协会)

IUGG Union Commission on Planetary Science (IUGG 行星科学委员会)

#### Organized by

State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (测绘遥感信息工程国家重点实验室)

Collaborative Innovation Center Geospatial Technology (地理信息协同创新中心)

Planetary Science Institute, China University of Geoscience (Wuhan) (中国地质大学(武汉)行星科学研究所)

### Scientific Committee (SC)

Co-Chair:

- · XIAO Long (China Geoscience University (Wuhan), China)
- · JIN Shuanggen (Shanghai Astronomical Observatory, China)
- · Jean-Pierre Barriot (Wuhan University, China)

## Local Organizing Committee (LOC)

Chair:

· LI Fei

Secretary General:

YAN Jianguo

Vice-Secretaries:

HAO Weifeng DENG Qingyun LIU Shanhong

### **General Information**

### **Meeting**

· Venue: 2rd Lecture Hall, Wuhan University (测绘遥感信息工程国家重点实验室二楼报告厅)

#### Lunch

- ・ Dec. 17, Xinghuyuan Restaurant (校内星湖园餐厅)
- · Dec. 18, Xinghuyuan Restaurant (校内星湖园餐厅)

#### **Welcome Dinner**

・ Dec. 17, The 5th floor, Hualian Hall, Junyi Dynasty Hotel(君宜王朝酒店 花莲厅)

### Registration

Venue: 2rd Lecture Hall, Wuhan University (测绘遥感信息工程国家重点实验室二楼报告厅)

Dec. 16······8:00-18:00

#### Accommodation

Junyi Dynasty Hotel(君宜王朝酒店)

#### **Local Contacts**

Coordinators:

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LIU Shanhong (刘山洪), 17762498109

Accommodation and Transportation:

GUO Xi(郭茜), 13163259356

LIU Suyan (刘素艳), 13100683712

Meeting Room:

ZHANG Haoshan (张浩山), 13129978170

CHEN Yihao (陈祎豪), 18625588789

#### **Notice**

Please transfer your PPT file to the contactor of meeting room half a day before your presentation. If you would like to use your own PC, please contact LOC much earlier and make your PC access to the projector available. (请提前 半天将您的口头报告 PPT 文件传递给会场组联络人。如您需要使用自带的笔记本电脑,请尽早联系会务组并确认投影仪接口能正常使用。)

Please keep quiet and set your mobile phone to "mute" mode when you are listening to the presentations in the meeting room. (会场请保持安静,并将您的手机设置为"静音"状态。)

# **Programme**

| 8:30-8:55 | Opening Session Convener: Jean-Pierre Barriot     | 2 <sup>rd</sup> Lecture Hall |
|-----------|---|------------------------------|
| 8:30-8:35 | Speech on behalf of the Scientific Committee (SC) | Xiao Long<br>SC Co-Chair     |
| 8:35-8:45 | Speech on behalf of Wuhan University (WHU)        | Li Fei                       |

| 8:45-10:10 | Session 1-1: Keynote presentations Convener: Jin Shuanggen                                     | 2 <sup>rd</sup> Lecture Hall |
|------------|--|------------------------------|
| 8:45-9:15  | S1-1-1: A conceptual study for a future mission of asteroid interiors                          | Noriyuki Namiki              |
| 9:15-9:45  | S1-1-2: The gravity field of comet 67P-CG and implications for its internal structure          | Thomas Paul Andert           |
| 9:45-10:15 | S1-1-3: Advancement of lunar gravity model due to the development of space tracking techniques | Li Fei                       |

## 10:15-10:25 Picture & Coffee break

| 10:25-11:40 | Session 1-2: Keynote presentations Convener: Noriyuki Namiki  | 2 <sup>rd</sup> Lecture Hall |
|-------------|---|------------------------------|
| 10:25-10:55 | S1-2-1: The gravity field models of asteroid Eros and CG-67 in<br>Bispherical harmonics from shape models | Jean-Pierre Barriot          |
| 10:55-11:25 | S1-2-2: Planetary Geodesy: Recent Progress and Prospective  | Jin Shuanggen                |
| 11:25-11:55 | S1-2-3: Singularity-free Equations of Planet Motion and their Applications                                | Xu Guochang                  |

| 12:00-14:00 | Lunch | Xinghuyuan |
|-------------|-------|------------|
| 12.00-14.00 | Lunch | Restaurant |

| 14:00-14:30 | Session 2-1: Keynote presentations Convener: Thomas Paul Andert | 2 <sup>rd</sup> Lecture Hall |
|-------------|---|------------------------------|
| 14:00-14:30 | S2-1-1: Status report of Hayabusa2 Laser Altimeter (LIDAR)      | Hirotomo Noda                |
| 14:30-15:00 | S2-1-2: The Micro spacecraft in 2016HO3 Exploration             | Wang Peng                    |
| 15:00-15:30 | S2-1-3: Spin-Orbit Coupling in Binary Asteroid Systems          | Hou Xiyun                    |

### 15:30-15:45 Coffee break

| 15:45-17:00 | Session 2-3: Dynamics, Gravity and Interior Structure Convener: Koji Matsumoto  | 2 <sup>rd</sup> Lecture Hall |
|-------------|---|------------------------------|
| 15:45-16:00 | S2-3-1: Dynamics and Applications of Non-Keplerian Displaced Orbits above an Asteroid   | Ming Xu                      |
| 16:00-16:15 | S2-3-2: High degree Phobos gravity field modeling from shape model  | Guo Xi                       |
| 16:15-16:30 | S2-3-3: The possible internal structure of near-Earth asteroid (469219) 2016 HO3  | Hu Shoucun                   |
| 16:30-16:45 | S2-3-4: A Potential Approach for Reconstructing internal structure of Small Asteroids Electromagnetic Full Waveform Inversion | Zhu Peimin                   |
| 16:45-17:00 | S2-3-5: A complex model of asteroid for joint inverse   | Li Yuan                      |

| 17:00-18:00 | Session 2-4: Planetary Exploration Convener: Jin Shuanggen   | 2 <sup>rd</sup> Lecture Hall |
|-------------|--|------------------------------|
| 17:00-17:15 | S2-4-1: Constraints on the Deep Lunar Interior Based on the Tidal Response Parameters                      | Yuji Harada                  |
| 17:15-17:30 | S2-4-2: Lunar Irregular Mare Patches: Testing the Waning-Stage Magmatic Foam Extrusion Formation Mechanism | Qiao Le                      |
| 17:30-17:45 | S2-4-3: Microwave Thermophysical Features of Apollo Basin<br>Revealed by CE-2 CELMS Data                   | Meng Zhiguo                  |
| 17:45-18:00 | S2-4-4: Crustal structures of major Mercurian basins   | Deng Qingyun                 |

| 18:00-20:00 | Dinner | Junyi Hotel |
|-------------|--------|-------------|
|-------------|--------|-------------|

## December 18, 2018 Tuesday

| 8:30 | )-9:00 | Session 3-1: Keynote presentations Convener: Yan Jianguo | 2 <sup>rd</sup> Lecture Hall |
|------|--------|--|------------------------------|
| 8:30 | )-9:00 | S3-1-1: An overview of MMX geodesy                       | Koji Matsumoto               |

| 9:00-10:05  | Session 3-2: Acceleration and Its Application in Asteroid Mission Convener: Yan Jianguo     | 2 <sup>rd</sup> Lecture Hall |
|-------------|---|------------------------------|
| 9:00-9:15   | S3-2-1: Current Progress of Space Electrostatic Accelerometer at HUST                       | Bai Yanzheng                 |
| 9:15-9:30   | S3-2-2: High-precision Magnetic Suspension Accelerometer Technology                         | Liu Min                      |
| 9:30-9:45   | S3-2-3: Measurement and applications of LOS (line of sight) acceleration of deep spacecraft | Jian Nianchuan               |
| 9:45-10:00  | S3-2-4: Chang'E-3 satellite and constraint of cosmic random background gravitational waves  | Tang Wenlin                  |
| 10:00-10:15 | S3-2-5: Studies of First-Stage (Level-1) Data Processing of GRAIL Mission                   | Xu Peng                      |

# 10:15-10:30 Coffee break

| 10:30-11:20 | Session 3-3: Radio Science and Orbit Determination Convener: Jean-Pierre Barriot | 2 <sup>rd</sup> Lecture Hall |
|-------------|--|------------------------------|
|-------------|--|------------------------------|

| 10:30-10:45 | S3-3-1: The study of radio observation of comets  | Wang Zhen      |
|-------------|---|----------------|
| 10:45-11:00 | S3-3-2: Chang'E-4 relay satellite precise orbit determination using bi-station tracking data  | Cao Jianfeng   |
| 11:00-11:15 | S3-3-3: Combined Orbit Determination for CE2 and Toutatis                                     | Hu Songjie     |
| 11:15-11:30 | S3-3-4: Image in MEX spacecraft precise orbit determination during Phobos flyby: A simulation | Liu Suyan      |
| 11:30-11:45 | S3-3-5: A laboratory Study of Phase-ratio Imagery Method                                      | Ma Pei         |
| 11:45-12:00 | S3-3-6Precise position and photometry of Near Earth Asteroids by Rotating-drift-scan CCD      | Tang Zhenghong |
| 12:00-12:15 | S3-3-7: Low-degree gravity field determination of Phobos from recent two MEX flybys           | Yan Jianguo    |

| 12:15-13:30 | Lunch       | Xinghuyuan | ı          |   |
|-------------|-------------|------------|------------|---|
|             | 12.13-13.30 | Lunch      | Restaurant | 1 |

Free to choose to visit Antenna Station or other arrangement......

| 18:00-20:00 Dinner Junyi Hotel |
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#### POSTER

| No. | Presenter      | Title   |
|-----|----------------|---|
| 1   | Wei Erhu       | Effect of Lunar Gravity Models on Chang'E-2 and Chang'E-3 Orbit       |
|     |                | Determination using VLBI  |
| 2   | Xu Luyuan      | Thickness Distribution of Primary Ejecta for Schrödinger Basin        |
| 3   | Yang Yongzhang | Numerical model of Phobos rotation                                    |
| 4   | Hao Weifeng    | An Improved Digital Elevation Model of the Lunar Mons Rümker Region   |
|     |                | Based on Multisource Altimeter Data                                   |
| 5   | Jin Weitong    | Lutetia Flyby Data Processing   |
| 6   | Liu Shanhong   | Precise lander positioning using Chang'E-3 lander data and simulation |
|     |                | for Chang'E-5   |
| 7   | He Qingbao     | Analysis of Chang'E-3 VLBI data on SNR and delay turbulence           |

# **Venue Map**



