

## **Information Item**

# **Swiss Committee on Space Research (CSR)**

**Xin Wu, CHIPP Observer in CSR**

**CHIPP Board Meeting, June 29, 2015**

# Background Information

- CSR is an organization within Swiss Academy of Natural Sciences (SCNAT)
  - An organization similar to CHIPP Board, but it is not a College of Professors
    - Members are nominated by CSR and elected by the SCNAT Executive Board
    - Meeting twice a year
- Mandate (from CSR profile)
  - The CSR coordinates and stimulates space research in Switzerland.
  - It maintains contact with international organisations like the European Space Agency ESA and the Committee of Space Research COSPAR. It produces a report every two years on space science activities in Switzerland.
    - <http://spaceresearch.scnatweb.ch/documents/brochure2012-2014.pdf>
  - A main objective of the CSR is to use the expertise of the community for scientific policy advice of federal agencies like the Swiss Space Office SSO and the Federal Department of Foreign Affairs EDA.

# CSR Current Members

- Werner Schmutz (PMOD/WRC, Solar), president
- Kathrin Altwegg (UNIBE, Planetary), Sam Krucker (FHNW, Solar), Domenico Giardini (ETHZ, Geophysics), Anton Ivanov (EPFL, Space Tech), Niklaus Kaempfer (UNIBE, Atmospheric), Alexandre Refregier (ETHZ, Cosmology), Volker Gass (EPFL, Space Tech), **Martin Pohl (UNIGE, Astroparticle)**, Didier Queloz (UNIGE, Astronomy), Nic Thomas (UNIBE, Planetary), Roland Walter (UNIGE, Astrophysics), Georges Meylan (EPFL, Cosmology), Paolo Ceppi (SUPSI, Space Tech), Thomas Schildknecht (UNIBE, Astronomy), Marcel Egli (HSLU, Space Biomedical), Stefan Wunderle (UNIBE, Climatology), Stéphane Paltani (UNIGE, Astrophysics)
- Ex Officio
  - Tristan Maillard, SNF representative
  - Andreas Werthmueller, SSO representative
  - Natália Archinard, FDFA representative
  - Peter Guggenbach, Swiss Space Industry representative
  - Klemens Hocke, Link to the Swiss Commission on Remote Sensing
  - Xin Wu, Link to CHIPP

# Last Meeting at March 31th 2015

1. Welcome (and head count of lunch attendees)
2. Minutes of the CSR meeting of 13. October 2014 (W.S.)
3. Finances
  - 2015 budget (WS)
4. CSR Members
  - status (WS)
  - proposal for new members (all)
5. ESA Science program
  - Status science program (SSO: AW)
6. Report from the scnac/MAP meeting 24.3.15 (WS)
10. Discussion item
  - Strategic aim of the CSR (all)  
(Document CSR\_SPACE-cost-overview-2015-2021\_27.3.15.xlsx)
11. Short communications
  - a) Micro Gravity - overview
  - b) Earth Observations - overview (Roadmap)
  - c) other (all)
12. Varia, next meeting  
X About 13:00 - lunch

# Cost Overview 2015-2017

## Space Science Projects Status and Cost 2015-2021 (in MEUR)

| Institute   | Mission       | Status 03.15 | Experiment          | Agency | ESA call   | Co-Op               | 2015 | 2016 | 2017 | 2018               | 2019 | 2020 | 2021 | Sum |
|-------------|---------------|--------------|---------------------|--------|------------|---------------------|------|------|------|--------------------|------|------|------|-----|
| UGE+DPNC    | PANGU         | prop. eval.  | PANGU               | ESA    | CN 2021    | INFN, PMO, IHEP     | 0.2  | 0.2  | 1.0  | 1.0                | 1.0  | 2.0  | 5.3  |     |
| UGE+DPNC    | AstroGam      | prop. eval.  | AstroGam            | ESA    | M4 2025    | INAF, CSNSM, INFN   | 0.2  | 0.2  | 1.0  | 1.0                | 1.0  | 1.0  | 4.3  |     |
| DPNC        | HERD          | proposal     | HERD                | China  |            | IHEP, INFN          | 0.2  | 0.2  | 0.2  | 1.0                | 1.0  | 2.0  | 4.5  |     |
| UGE+DPNC    | LOFT          | prop. eval.  | contribution        | ESA    | M4 2025    |                     | 0.1  | 0.1  | 0.2  | 0.8                | 0.8  | 0.8  | 3.0  |     |
| PMOD/WRC    | FY-3E         | phase A      | JOIM                | CMA    |            | CIOMP               | 0.1  | 0.2  | 1.7  | 0.5                |      |      | 2.5  |     |
| PMOD/WRC    | SOLAR C/ EPIC | prop. eval.  | IM                  | ESA    | M4 2025    | D, JAXA             | 0.2  | 0.2  | 0.2  | 0.2                | 0.5  | 1.0  | 2.3  |     |
| PMOD/WRC    | HiRISE        | prop. eval.  | PREMOS II           | ESA    | M4 2025    | F                   | 0.2  | 0.2  | 0.3  | 0.4                | 0.5  | 1.0  | 2.6  |     |
| PMOD/WRC    | SUIT/SWUSV    | prop. eval.  | SUPR                | ESA    | CN 2021    | F, CAS              | 0.1  | 0.2  | 0.7  | 1.0                | 1.0  |      | 3.0  |     |
| eSpace EPFL | CubETH        | Phase B      | GNSS payload        | CH-SSO | tbd (GSTP) |                     | 0.1  | 0.5  | 0.3  | 0.1                |      |      | 1.0  |     |
| eSpace EPFL | CADRE         | Phase 0      | ADR demonstration   | CH-SSO | tbd (GSTP) |                     | 0.1  | 1.0  | 5.0  | 3.0                | 2.0  |      | 11.1 |     |
| eSpace EPFL | CleanSpaceOne | Proposal     | Deorbit SwissCube   | CH-SSO | tbd        |                     |      |      |      | no funding profile |      |      |      |     |
| UBE/MASS    | IMAP          | idea         | ENA-Lo, ISM         | NASA   |            | SWRI, LMATC, UNH    | 0.2  | 0.4  | 1.0  | 1.0                | 0.4  |      | 3.0  |     |
| UBE/MASS    | IVO           | idea         | INMS                | NASA   |            | UA, APL, IRF, TUB   | 1.0  | 3.0  | 3.0  | 1.0                |      |      | 8.0  |     |
| UBE/MASS    | Chagall       | idea         | INMS                | NASA   |            | UMaryland, JPL, APL | 1.0  | 3.0  | 3.0  | 1.0                |      |      | 8.0  |     |
| UBE/MASS    | Corsair       | idea         | INMS                | NASA   |            |                     | 2.0  | 2.0  | 2.0  | 2.0                | 2.0  | 2.0  | 9.0  |     |
| UBE/MASS    | Mars Lander   | idea         | CAMAM               | CNSA   |            |                     | 1.0  | 2.0  | 2.0  | 2.0                | 2.0  | 2.0  | 11.0 |     |
| UBE/MASS    | Mars Orbiter  | idea         | TIMS & ENA          | CNSA   |            |                     | 0.5  | 0.7  | 0.8  | 0.8                | 0.8  | 0.8  | 4.4  |     |
| UBE/MASS    | JUICE         | Phase B2     | PEP, NIM            | ESA    | L1 2022    |                     | 1.0  | 2.0  | 3.0  | 3.0                | 3.0  | 2.0  | 14.0 |     |
| UBE/REM     | JUICE         | Phase B2     | GALA                | ESA    | L1 2022    |                     | 0.2  | 0.5  | 0.8  | 0.8                | 1.0  | 0.7  | 4.0  |     |
| UBE/IAP     | JUICE         | Phase B2     | SWI                 | ESA    |            |                     | 0.7  | 0.8  | 0.7  | 0.8                |      |      | 3.0  |     |
| UBE/EXO     | PLATO         | Phase B      | TOU Mechanical Stru | ESA    | M3 2024    |                     | 0.3  | 0.7  | 1.0  | 2.0                | 2.0  | 3.0  | 11.0 |     |
| UGE         | ATHENA        |              |                     | ESA    | L2 2028    |                     | 0.1  | 0.2  | 0.2  | 0.5                |      |      | 1.0  |     |
| UZH+UGE     | eLISA         |              |                     | ESA    | L3         |                     |      |      |      | no funding profile |      |      |      |     |

only projects included that are not yet funded (in particular CHEOPS and projects for M1 and M2)

1.4 9.2 23.6 26.2 21.0 18.0 16.7 115.0