

## PLATO Stellar Science kick-off meeting 9-10 April 2015, Paris

The first PLATO Stellar Science (WP120 STESCI) meeting after the ESA M3 selection will be held on April 9th-10th 2015 in Paris.

The meeting will be held in Paris Observatory (hereafter OP, 61 Avenue de l'Observatoire, 75014 Paris) as well as in Institut d'Astrophysique de Paris (hereafter IAP, 98bis Boulevard Arago, 75014 Paris).

The goal is to produce at the end of the meeting a preliminary draft of WP120 Definition document that will describe the specifications of the methods and procedures for accurately characterising the stars of the core program. The internal and external inputs/outputs will be detailed as well as the interface procedures between the WPs within WP120 and with the Plato Data Center (PDC). This document is requested as part of the internal Consortium datapackage.

The meeting will be organised in plenary sessions as well as an afternoon splinter session. There will be 5 working groups (description below). For each stellar property considered as an output a the working group, the specification document (a preliminary draft) must contain for instance:

- output: definition and/or description, required PLATO specification
- inputs: definition and/or description, specification of the quality of the input needed to provide the output satisfying the requested Plato specification
- tools: methods (to obtain the output and its uncertainty) and procedures to run these methods
- interfaces with PDC
- tests and simulations, observations
- identification of biases keeping from reaching the specifications
- the work to be done before adoption (beginning 2016)

There will be also a list of questions (general or specific to each working group) to be answered.

Working groups (with examples of output)

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\* WG1 (chair M.A. Dupret): *Stellar models*

output: specifications for parameters driving a high quality of the stellar models to be built, specifications for the grids, ...

\* WG2 (chair T. Morel): *Non-seismic diagnostics and model atmosphere*

output: stellar radius, gravity, effective temperature, chemical composition, ...

\* WG3 (chair: A. F. Lanza): *Stellar activity & rotation*

output: rotation periods, activity level, ...

\* WG4 (chair M. Cunha): *Seismic diagnostics and stellar parameters*

output: seismic stellar mass, radius, age ...

\* WG5 (chair W.J. Chaplin): Seismic *data analysis*  
output: oscillation frequencies, amplitudes, widths ...

## **Program :**

Thursday april 9th

9:15-9:30 Welcome coffee (at Amphitheater IAP)

(times include 5-10mn discussion)

***9:30-12:30 General session (at Amphitheater IAP)***  
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***Chair : E. Michel***

9:30-9:40 Introduction (M.J. Goupil)

9:40-10:00 Latest news about the mission PLATO 2.0 (H. Rauer)

10:00-10:20 Organisation of the PSPM and interface issues (TBC)

10:20-10:40 Input catalogue and target selection (M. Deleuil)

10:40-11:00 PLATO performances relevant for stellar characterisation (R. Samadi and T. Appourchaux)

11:00-11:20 Coffee break

11:20- 10:40 PLATO Data Center (L. Gizon)

11:40-12:00 Stellar Analysis System (T. Appourchaux)

12:00-12:15 WP120 and running of the meeting (M.J. Goupil)

12:15-12:30 Overall discussion

12:30 Lunch in the Cassini hall (at Observatoire de Paris)

***14:00- 19:00 Splinter sessions***  
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- WG1: Salle des Séminaires (at IAP)

- WG2: Salle du Batiment B (at Observatoire de Paris)

- WG3: Salle du Conseil (at Observatoire de Paris)
- WG4: Salle de l'Atelier (at Observatoire de Paris)
- WG5 : Salle du Conseil (at IAP)

A coffee break will be organised at 4 pm for all WGs at the entrance of the Salle du Conseil (Observatoire de Paris)

Friday april 10th

***9:00-12:30 General session (at Cassini hall, Observatoire de Paris)***

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***Chair : K. Belkacem***

Presentations of the synthesis of the 9th afternoon discussion by each of the WG leaders (WG1 to WG3, 25 mn each)

9:00 – 9:30 Synthesis of WG1 by M.A. Dupret

09:30 – 10:00 Synthesis of WG2 by T. Morel

10:00 – 10:30 Synthesis of WG3 by N. Lanza

10:30-11:00 Coffee break

11:00 – 11:30 Synthesis of WG4 by M. Cunha

11:30 – 12:00 Synthesis of WG5 by W.J. Chaplin

12:00 - 12:30 Interfaces and redundancies (F. Baudin)

12:30 Lunch in the Cassini hall (at Observatoire de Paris)

***14:00- 16:30 (chair MJ Goupil, at Amphitheater IAP)***

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Overall discussion on the internal and external interfaces of the WP12x and setting up of a working flow.

**SOC :**

M.J. Goupil (Chair) – M.A. Dupret – T. Morel – A.F. Lanza – M. Cunha – J. Christensen-Dalsgaard – K. Belkacem – B. Mosser – W.J. Chaplin – F. Baudin

**LOC :**

M.J. Goupil (Chair) - K. Belkacem – C. Barban - F. Baudin – T. Sonoi – M. Vrad –  
R. Peralta