

## Tuesday, May 22th

13:00 Registration

13:30 - 13:50 Welcome (M.J. Goupil)

### **Session 1: The PLATO mission** (Moderator: M.J. Goupil)

13:50 – 14:10 The implementation of PLATO within the ESA Science programme (A. Heras)

14:10 - 14:30 PLATO from the exoplanet point of view (M. Deleuil)

14:30 - 15:50 PSM management (D. Brown)

15:50 - 15:20 The PLATO Input Catalogue (G. Piotto)

15:30 - 15:45 Discussion

15:45 - 16:15 coffee break

### **Session 2: Optimisation, Inference, selection criterium** (Moderator: M. Cunha)

16:15 -16:45 Challenges for fitting observations of PLATO stars on the main sequence (D. Reese)

16:45 -17:15 Challenges for fitting observations of PLATO subgiant stars. (S. Deheuvels)

17:15 -17:30 Discussion

17:30 -17:45 BASTA: current features and planned development (V. Silva Aguirre)

17:45 -18:30 WP124 activity management (M. Cunha)

## Wednesday, May 23th

9:00-9:30 **Session 1 (continued)** Plato signal to noise ratio (Carsten Paproth)

### **Session 3: Classical age dating** (Moderators: J. Christensen-dalgaard & A. Serenelli)

9:30 - 10:00 Age determination in detached eclipsing binary systems (S. Degl'Innocenti)

10:00 - 10:30 Isochrone fitting: model uncertainties and limitations (P. Moroni)

10:30 - 11:00 Inferring stellar ages from Gaia data (R. Andrae)

11:00 - 11:30 Activity-related age indicators (S. Barnes)

11:30 - 12:00 coffee break

12:00 - 12:45 WP125 activity management (J. Christensen-dalgaard)

12:45-14:00 lunch

### **Session 4: Benchmark stars: which stars for what purpose?** (Moderators: T. Morel & M. Cunha)

14:00 - 14:30 Introduction: benchmarks in WP120 (J. Christensen-Dalgaard)

14:30 - 15:00 Prospects from interferometry and asteroseismology : a symbiosis for stellar characterization (L. Bigot)

15:00 - 15:30 Benchmark stars: prospects from eclipsing binaries (P. Maxted)

15:30 – 16:00 The programme: «Accurate masses for double-lined spectroscopic binary components (Y. Lebreton)

16:00 - 16:30 coffee break

16:30 - 17:00 Benchmark targets for studying Rotation and Activity of Sun-like stars and its evolution (J.D. do Nascimento )

- 17:00 - 17:30 Lessons learned from the TESS target selection (K. Stassun)
- 17:30 - 17:45 Interferometry and exoplanets, (R. Ligi)
- 17:45 - 18:00 Benchmarks for asteroseismology: what we learnt from oscillating red giants in eclipsing binaries with the Kepler mission (P. Gaulme)
- 18:15 - 18:45 Discussion (Moderators: T. Morel & M. Cunha)

### **Thursday , May 24th**

#### **Session 5: Updating stellar modelling** (Moderators: A. Serenelli & J. Christensen-Dalsgaard)

- 9:00 - 9:30 Multi-dimensional stellar structure models applied to the problem of convective boundary mixing (overshooting) (I. Baraffe)
- 9:30 - 10:00 Impact of atomic diffusion on the structure and surface abundances of G and F type stars: stellar parameter determinations and effects of rotation (M. Deal)
- 10:00 - 10:30 Other aspects of input physics: nuclear rates, screening, opacities, EOS (A. Serenelli)
- 10:30 - 11:00 Coupling 3D atmosphere into 1D stellar models. (V. Silva-Aguirre)
- 11:00 - 11:30 coffee break
- 11:30 - 12:00 An evolutionary scenario for M dwarf Stars: shortcomings and improvements in stellar modelling (S. Cassisi)
- 12:00-12:15 Reviving Kufuß model for convection (G. Wuchterl)
- 12:15-12:30 Improving the calibration of the mixing length parameter of convection: implications for the radii of cool stars (F. Spada)
- 12:30-12:45 3D simulations of DA white dwarfs for studying overshooting (F. Kupka)
- 12:45-14:00 lunch
- 14:00 - 14:40 WP121 activity management (A. Serenelli)

#### **Session 6: 3D modelling** (Moderator: J. Ballot & A. Serenelli)

- 14:40 - 15:10 Stagger grid of 3D atmosphere models (Remo Collet)
- 15:10 - 15:40 Impact of the stellar surface structure on the solar-like oscillations (R. Samadi)
- 15:40 - 16:10 Determination of fundamental stellar parameters from granulation signal (H. Ludwig)
- 16:10 - 16:30 WP126 activity management (J. Ballot)
- 16:30-19:00 Visit to the castle
- 20:30 Social dinner

### **Friday , May 25th**

#### **Session 7: Simulating PLATO light curves and extraction of parameters** (*surface rotation and peak bagging*) (Moderators: W.J. Chaplin & A.F. Lanza)

- 9:30 - 9:50 Current status of PLATO Solar-like light curve simulator and future developments (R. Samadi)
- 9:50 - 10:10 Kepler light curves as templates for simulating PLATO light curves (S. Aigrain)
- 10:10 - 10:20 Organization of the hare-and-hound exercise to test algorithms for stellar rotation (A. F. Lanza)
- 10:20 - 10:45 Stellar angular momentum evolution: latest observations and models (J. Bouvier)
- 10:45 - 11:10 Asteroseismic Peak-Bagging: State of the Art and Planned Development (G. Davies)
- 11:10 - 11:40 coffee break

11:40 - 11:55 The rotation-activity relation of M dwarfs: from K2 to PLAT (S. Raetz)

11:55 - 12:20 Inclination angle measurement and exoplanets (C. Damiani)

12:20 - 12:40 WP123 activity management (A.F. Lanza)

12:40 - 13:00 WP128 activity management (W.J. Chaplin)

13:00-14:30                      lunch

14:30-17:00    WP12 management meeting (restricted to the top leaders)