



1st STARKEY meeting (April 22-24, 2015)

Department of Physics and Astronomy
University of Padova
Astronomical Observatory, INAF
Vicolo dell'Osservatorio 3

Agenda

Objectives:

1. Review purpose of the project
2. Promote collaborations and exchanges
3. Identify challenges to goal
4. Plan next steps

Participants: Bernhard Aringer, Sara Bladh, Martha Boyer, Alessandro Bressan, Yang Chen, Julianne Dalcanton, Marco Dussin, Leo Girardi, M.A.T. Groenewegen, Susanne Hoefner, Thomas Lebzelter, Paola Marigo, Josefina Montalban, Ambra Nanni, Christine Nicholls, Sofia Ramstedt, Emanuele Ripamonti, Michele Trabucchi, Peter Wood

[22/04/2015](#) (Sala Jappelli, Observatory)

9:00 – 12:30 & 14:00-17:00

9:00 – 9:10 Welcome by Paola Marigo

◆ WP-IT

9:10 – 9:40 Introduction to the new STARKEY server, web-site, and informatics tools
(Marco Dussin/Ivano Masiero)

9:40-10:15 Review purpose of the project (Paola Marigo)

◆ WP1: Stellar Tracks

10:15 – 10:30 Leo Girardi: PARSEC tracks

10:30 – 11:00 coffee break

11:00 – 11:40 Paola Marigo: COLIBRI tracks

◆ WP2: Pulsation

11:40 – 12:30 Josefa Montalban: Overview on Asteroseismology of early-AGB stars

12:30 – 14:30 lunch

14:30 – 15:15 Michele Trabucchi: Overview of LPVs & Grids of LPV models

15:15 – 15:45 Thomas Lebzelter: Update on ongoing program on the detection of LPVs in
stellar clusters

15:45 – 16:15 Christine Nicholls: Long secondary periods, ellipsoidal variations, and other AGB
variability

16:15 – 16:45 coffee break

??? (Wood)

– 17:30 Open discussion

23/04/2015 (Sala Jappelli, Observatory)

9:00 – 12:00 & 14:00-17:00

◆ **WP3: Stellar Atmospheres, static and dynamical**

9:00 – 9:40 Bernhard Aringer: Overview & The COMARCS spectral grid

9:40 – 10:10 Sara Bladh: Overview & The dynamical model grids

10:10 – 10:30 Discussion

10:30 – 11:00 coffee break

11:00 – 11:40 Susanne Hoefner: New developments of dynamical models

11:40 – 11:55 Sofia Ramstedt: Observations: Circumstellar abundances

11:55 – 12:30 Paola Marigo: Theory: non-equilibrium (NE) chemistry in the inner CSEs

12:30 – 14:30 lunch

◆ **WP4: Dust Formation and Radiative Transfer**

14:30 – 15:00 Ambra Nanni: Overview & the RT model grid

15:00 – 15:30 Martin Groenewegen: Update about dust RT

15:30 – 16:00 Emanuele Ripamonti: Dust formation in molecular clouds

16:00 – 16:30 coffee break

16:30 – 16:50 Ambra Nanni + Bernhard Aringer: first results on dust formation & spectra in NE chemistry Conditions

–17:30 Open discussion

Spritz in Padova and social dinner

24/04/2015 (Sala Jappelli, Observatory)

9:00 – 12:00 & 14:00-17:00

WP5: Population synthesis with TP-AGB stars and the Calibration Set

9:00 – 9:40 Leo Girardi: Overview of population synthesis & TRILEGAL

9:40 – 10:00 Galaxies with HST photometry and SFH: ANGST + PHAT (Leo or Julianne?)

10:00 – 10:30 Martha Boyer: Galaxies with Sloan photometry & DUSTINGS

10:30 – 11:00 coffee break

11:00 – 11:30 An ongoing all-round project: 47Tuc

11:30 – 11:45 Christine Nicholls: CRIRES-POP Spectral Atlases of Cool Giants

11:45 – 12:30 General discussion and Planning next steps

12:30 – 14:30 lunch

14:30 – 16:00 (Paper)work

16:00 – 16:30 coffee break

16:30 – 17:30 More work