



## **4<sup>th</sup> STARKEY meeting (April 18-20, 2018)**

Department of Physics and Astronomy  
University of Padova  
Vicolo dell'Osservatorio 3

Astronomical Observatory Padova, INAF  
Vicolo dell'Osservatorio 5

PADOVA

### **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,  
Léo Girardi, M.A.T. Groenewegen, Paola Marigo, Josefina Montalbán, Ambra Nanni,  
Giada Pastorelli, Stefano Rubele, Michele Trabucchi, Patricia Whitelock, Peter Wood

**Wed 18/04/2018** (Sala Jappelli, Observatory)

Dedicated to short (10-15 min) overviews about *Stellar Models and Population Synthesis*

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9:00 – 9:05 Welcome by Paola Marigo

**◆WP1: Stellar Tracks**

9:05 – 9:30 Stellar Tracks and Isochrones  
(*Paola Marigo, Léo Girardi*)

**◆ WP5: Population Synthesis and the Calibration Set**

9:30 – 10:00 Modelling TP-AGBs in PHAT  
(*Yang Chen*)

10:00 – 10:30 Star Formation History of the Magellanic Clouds  
(*Stefano Rubele*)

10:30 – 11:00 Coffee Break

11:00 – 11:30 Constraining TP-AGB models with resolved stellar populations  
in the Magellanic Clouds  
(*Giada Pastorelli*)

11:30 – 12:00 Resolved AGB populations in and around the Local Group  
with HST and Spitzer  
(*Martha Boyer*)

12:00 – 12:30 Discussion

12:30 – 14:00 Lunch

14:00 + Working Groups  
(Sala Jappelli, Observatory – Saletta Riunioni, Departement )

**Thu 19/04/2018** (Sala Jappelli, Observatory)

Dedicated to short (10-15 min) overviews about *Pulsation*

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◆WP2: Pulsation

9:00 – 9:30 Non-radial modes in AGB stars  
(*Josefina Montalbán*)

9:30 – 10:00 Pulsation models and Long Period Variables in the Magellanic Clouds  
(*Michele Trabucchi*)

10:00 – 10:30 Long period luminous variables in nearby galaxies  
(*Patricia Whitelock*)

10:30 – 11:00 Coffee Break

11:00 – 12:30 Discussion

12:30 – 14:00 Lunch

14:00 + Working Groups  
(Sala Jappelli, Observatory – Saletta Riunioni, Departement)

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*19:00 Spritz in Padova and Social Dinner*

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**Fri 20/04/2018** (Sala Jappelli, Observatory/Sala Riunioni, Department)

Dedicated to short (10-15 min) overviews about *Stellar Atmospheres, Winds, Dust Formation and Radiative Transfer*

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**◆WP3: Stellar Atmospheres & Winds**

09:00 – 09:30 Static Model Atmospheres, Abundances & New Opacities  
(*Bernhard Aringer*)

09:30 – 10:00 An extensive grid of DARWIN models for M-type AGB stars  
(*Sara Bladh*)

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

10:00 – 10:30 Dust around TP-AGB stars: current status and future developments  
(*Ambra Nanni*)

10:30 – 11:00 Coffee Break

11:00 – 11:30 Infrared Long Period Variables in the VMC data  
(*Martin Groenewegen*)

11:30 – 12:30 Discussion + Working groups

12:30 – 14:00 Lunch

14:00 + Working groups & Summary of the meeting  
(Sala Jappelli, Observatory – Saletta Riunioni, Department)