

PLATO Science in Italy: ready to data exploitation?



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Monday, 25 September 2023 09:30 (5 minutes)

Primary author: PAGANO, Isabella (INAF)

Presenters: TOMMASI, Elisabetta (ASI); PAGANO, Isabella (INAF)

Contribution ID: 2

Type: **not specified**

Status of the mission

Monday, 25 September 2023 09:35 (25 minutes)

Presenter: PAGANO, Isabella (INAF)

Session Classification: Session 1 - Status and general Information

Contribution ID: 3

Type: **not specified**

PLATO performance & PLATO SIM

Monday, 25 September 2023 10:00 (20 minutes)

Presenter: BORSA, Francesco (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 1 - Status and general Information

Contribution ID: 4

Type: **not specified**

From CCDs to data

Monday, 25 September 2023 10:20 (15 minutes)

Presenter: COSENTINO, Rosario (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 1 - Status and general Information

Contribution ID: 5

Type: **not specified**

PLATO data distribution: type of data and timing

Monday, 25 September 2023 10:35 (25 minutes)

Presenter: PIOTTO, Giampaolo

Session Classification: Session 1 - Status and general Information

Contribution ID: 6

Type: **not specified**

The PIC: Fields in the PIC

Monday, 25 September 2023 11:30 (30 minutes)

Presenter: NASCIMBENI, Valerio (INAF-OAPD)

Session Classification: Session 1 - Status and general Information

Contribution ID: 7

Type: **not specified**

The PIC: Targets in the PIC

Monday, 25 September 2023 12:00 (30 minutes)

Presenter: MONTALTO, Marco (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 1 - Status and general Information

Contribution ID: 8

Type: **not specified**

The PIC: The M stars sample

Monday, 25 September 2023 12:30 (15 minutes)

Presenter: PRISINZANO, Loredana (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 1 - Status and general Information

Contribution ID: 9

Type: **not specified**

Session 1 discussion chaired by

Monday, 25 September 2023 12:45 (30 minutes)

Presenter: PIOTTO, Giampaolo

Session Classification: Session 1 - Status and general Information

Contribution ID: **10**

Type: **not specified**

Future instruments for exoplanets: what's next

Monday, 25 September 2023 14:30 (30 minutes)

Presenter: RAGAZZONI, Roberto (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 1 - Status and general Information

Contribution ID: 11

Type: **not specified**

Asteroseismology with PLATO

Monday, 25 September 2023 15:00 (30 minutes)

Presenter: MIGLIO, Andrea (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: 12

Type: **not specified**

Magnetic activity and Rotation with PLATO

Monday, 25 September 2023 15:30 (30 minutes)

Presenter: BRETON, Sylvain (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: 13

Type: **not specified**

Stellar parameters with PLATO

Monday, 25 September 2023 16:30 (30 minutes)

Presenter: CASSISI, Santi (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: 14

Type: **not specified**

Asteroseismology as a way to calibrate Rossby number and gyrochronology relations

Monday, 25 September 2023 17:00 (15 minutes)

Presenter: CORSARO, Enrico Maria Nicola (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: 15

Type: **not specified**

Towards a reliable Rossby number calibration for MS and cool stars

Monday, 25 September 2023 17:15 (15 minutes)

Presenter: BONANNO, Alfio Maurizio (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: 16

Type: **not specified**

A theoretical framework for M dwarfs in the context of PLATO

Monday, 25 September 2023 17:30 (15 minutes)

Presenter: CASSISI, Santi (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: 17

Type: **not specified**

Modeling of stellar surface

Monday, 25 September 2023 17:45 (15 minutes)

Presenter: PETRALIA, Antonino (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: **18**

Type: **not specified**

Stellar parameters derived from space-based photometry and high-resolution spectroscopy

Tuesday, 26 September 2023 09:15 (15 minutes)

Presenter: FRASCA, Antonio (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: 19

Type: **not specified**

Session 2 discussion chaired by

Tuesday, 26 September 2023 09:30 (30 minutes)

Presenter: LANZA, Antonino Francesco (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 2 - Stellar Science: expected gain, challenges

Contribution ID: 20

Type: **not specified**

GOP: photometry

Tuesday, 26 September 2023 11:30 (20 minutes)

Presenter: NARDIELLO, Domenico (Laboratoire D'astrophysique De Marseille (LAM))

Session Classification: Session 3 - Ground-based Observation Program (GOP), Ancillary Science, Other topics

Contribution ID: 21

Type: **not specified**

Complementary ground based spectroscopy

Tuesday, 26 September 2023 11:50 (20 minutes)

Presenter: RAINER, Monica (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 3 - Ground-based Observation Program (GOP), Ancillary Science, Other topics

Contribution ID: 22

Type: **not specified**

Session 3 discussion chaired by

Tuesday, 26 September 2023 12:10 (30 minutes)

Presenter: SOZZETTI, Alessandro (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 3 - Ground-based Observation Program (GOP), Ancillary Science, Other topics

Contribution ID: 23

Type: **not specified**

Organization of the GOP & radial velocity obs

Tuesday, 26 September 2023 10:00 (30 minutes)

Presenter: MALAVOLTA, Luca (Università degli Studi di Padova)

Session Classification: Session 3 - Ground-based Observation Program (GOP), Ancillary Science, Other topics

Contribution ID: 24

Type: **not specified**

GOP: imaging

Tuesday, 26 September 2023 10:30 (30 minutes)

Presenter: DESIDERA, Silvano (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 3 - Ground-based Observation Program (GOP), Ancillary Science, Other topics

Contribution ID: 25

Type: **not specified**

Terrestrial planets in HZ of solar type stars: challenges and future prospects

Tuesday, 26 September 2023 12:40 (30 minutes)

Presenter: MALAVOLTA, Luca (Università degli Studi di Padova)

Session Classification: Session 4 - Terrestrial planets in the HZ of solar type stars: expected gain, challenges

Contribution ID: 26

Type: **not specified**

Exoplanet around M stars: the contribution of PLATO

Tuesday, 26 September 2023 14:30 (30 minutes)

Presenter: AFFER, Laura (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 4 - Terrestrial planets in the HZ of solar type stars: expected gain, challenges

Contribution ID: 27

Type: **not specified**

Efficiency of the oxygenic photosynthesis on Earth-like planets

Tuesday, 26 September 2023 15:00 (15 minutes)

Presenter: COVONE, Giovanni (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 4 - Terrestrial planets in the HZ of solar type stars: expected gain, challenges

Contribution ID: 28

Type: **not specified**

Climate and habitability of rocky planets

Tuesday, 26 September 2023 15:15 (15 minutes)

Presenter: SILVA, Laura (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 4 - Terrestrial planets in the HZ of solar type stars: expected gain, challenges

Contribution ID: 29

Type: **not specified**

Refractions and Biosignatures in Atmosphere of Habitable Exoplanets

Tuesday, 26 September 2023 15:30 (15 minutes)

Presenter: MARIS, Michele (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 4 - Terrestrial planets in the HZ of solar type stars: expected gain, challenges

Contribution ID: 30

Type: **not specified**

Session 4 discussion chaired by

Tuesday, 26 September 2023 15:45 (20 minutes)

Presenter: BORSA, Francesco (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 4 - Terrestrial planets in the HZ of solar type stars: expected gain, challenges

Contribution ID: 31

Type: **not specified**

Synergies with Gaia

Tuesday, 26 September 2023 16:30 (30 minutes)

Presenter: SOZZETTI, Alessandro (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 5 - Neptunians and Jovians, Atmospheres: expected gain, challenges

Contribution ID: 32

Type: **not specified**

Synergies with Ariel

Tuesday, 26 September 2023 17:00 (30 minutes)

Presenter: MICELA, Giuseppina (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 5 - Neptunians and Jovians, Atmospheres: expected gain, challenges

Contribution ID: 33

Type: **not specified**

Synergies with Tess

Tuesday, 26 September 2023 17:30 (30 minutes)

Presenter: MONTALTO, Marco (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 5 - Neptunians and Jovians, Atmospheres: expected gain, challenges

Contribution ID: 34

Type: **not specified**

Neptune-sized and unexpected: unveiling the variety of compositions of intermediate-size transiting planets with HARPS-N

Wednesday, 27 September 2023 09:15 (30 minutes)

Presenter: PINAMONTI, Matteo (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 5 - Neptunians and Jovians, Atmospheres: expected gain, challenges

Contribution ID: 35

Type: **not specified**

A systematic validation of hot Neptunes in TESS data

Wednesday, 27 September 2023 09:45 (15 minutes)

Primary author: MAGLIANO, Christian (Istituto Nazionale di Astrofisica (INAF))

Co-author: COVONE, Giovanni (Istituto Nazionale di Astrofisica (INAF))

Presenters: MAGLIANO, Christian (Istituto Nazionale di Astrofisica (INAF)); COVONE, Giovanni (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 5 - Neptunians and Jovians, Atmospheres: expected gain, challenges

Contribution ID: 36

Type: **not specified**

PLATO on the shoulders of TESS: analyzing mono-transit planet candidates in TESS data as a prior knowledge for PLATO observations

Wednesday, 27 September 2023 10:00 (15 minutes)

Presenter: MAGLIANO, Christian (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 5 - Neptunians and Jovians, Atmospheres: expected gain, challenges

Contribution ID: 37

Type: **not specified**

Exoplanet atmospheric characterization with PLATO Phase curves: Best Candidates

Wednesday, 27 September 2023 10:15 (15 minutes)

Presenter: SINGH, Vikash (INAF)

Session Classification: Session 5 - Neptunians and Jovians, Atmospheres: expected gain, challenges

Contribution ID: **38**

Type: **not specified**

Session 5 discussion chaired by

Wednesday, 27 September 2023 10:30 (15 minutes)

Presenter: BONOMO, Aldo Stefano (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 5 - Neptunians and Jovians, Atmospheres: expected gain, challenges

Contribution ID: 39

Type: **not specified**

Frequency of Jupiter analogs in small-planet systems to understand the formation of short-period super-Earths/sub-Neptunes and our Solar System. The fundamental role of PLATO

Wednesday, 27 September 2023 10:45 (30 minutes)

Presenter: BONOMO, Aldo Stefano (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 6 - From Formation to Architectures: expected gain, challenges (exomoons, rings, ...)

Contribution ID: 40

Type: **not specified**

The contribution of PLATO to the quest for young exoplanets

Wednesday, 27 September 2023 11:45 (30 minutes)

Presenter: BENATTI, Serena (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 6 - From Formation to Architectures: expected gain, challenges (exomoons, rings, ...)

Contribution ID: 41

Type: **not specified**

A follow-up of the very young multi-planet system V1298 Tau

Wednesday, 27 September 2023 12:15 (20 minutes)

Presenter: DAMASSO, Mario (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 6 - From Formation to Architectures: expected gain, challenges (exomoons, rings, ...)

Contribution ID: 42

Type: **not specified**

TTV e TDV

Wednesday, 27 September 2023 12:35 (20 minutes)

Presenter: BORSATO, Luca (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 6 - From Formation to Architectures: expected gain, challenges (exomoons, rings, ...)

Contribution ID: 43

Type: **not specified**

Exoplanets in star clusters

Wednesday, 27 September 2023 12:55 (20 minutes)

Presenter: NARDIELLO, Domenico (Laboratoire D'astrophysique De Marseille (LAM))

Session Classification: Session 6 - From Formation to Architectures: expected gain, challenges (exomoons, rings, ...)

Contribution ID: 44

Type: **not specified**

Session 6 discussion chaired by

Wednesday, 27 September 2023 13:15 (15 minutes)

Presenter: NASCIMBENI, Valerio (INAF-OAPD)

Session Classification: Session 6 - From Formation to Architectures: expected gain, challenges (exomoons, rings, ...)

Contribution ID: 45

Type: **not specified**

Studying angular momentum distribution in transiting planetary systems with PLATO. The role of tidal and magnetic star-planet interactions

Wednesday, 27 September 2023 14:30 (30 minutes)

Presenter: LANZA, Antonino Francesco (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 7 - Star-Planet interaction

Contribution ID: 46

Type: **not specified**

Analysis of flares in TESS light curves

Wednesday, 27 September 2023 15:00 (15 minutes)

Presenter: COLOMBO, Salvatore (INAF)

Session Classification: Session 7 - Star-Planet interaction

Contribution ID: 47

Type: **not specified**

White-light stellar flares at high cadence: what can PLATO tell us about the impact of flares on exoplanets?

Wednesday, 27 September 2023 15:15 (15 minutes)

Presenter: BRUNO, Giovanni (INAF)

Session Classification: Session 7 - Star-Planet interaction

Contribution ID: 48

Type: **not specified**

SPI @high energies and possible synergies with PLATO

Wednesday, 27 September 2023 15:30 (15 minutes)

Presenter: PILLITTERI, Ignazio Francesco (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 7 - Star-Planet interaction

Contribution ID: 49

Type: **not specified**

Session 7 discussion chaired by

Wednesday, 27 September 2023 15:45 (15 minutes)

Presenter: MESSINA, Sergio (INAF)

Session Classification: Session 7 - Star-Planet interaction

Contribution ID: 50

Type: **not specified**

Highlights of the workshop

Wednesday, 27 September 2023 16:00 (20 minutes)

Presenter: MICELA, Giuseppina (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 8 - Highlights and plans

Contribution ID: 51

Type: **not specified**

Discussion: What we need as a Team? chaired by

Wednesday, 27 September 2023 16:20 (20 minutes)

Presenter: MICELA, Giuseppina (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Session 8 - Highlights and plans

Contribution ID: 52

Type: **not specified**

Future meetings

Wednesday, 27 September 2023 16:40 (20 minutes)

Session Classification: Session 8 - Highlights and plans