

SOLARNET: High-resolution Solar Physics Network

WORK PACKAGE 3 NA2: Network activities to foster synergistic collaborations

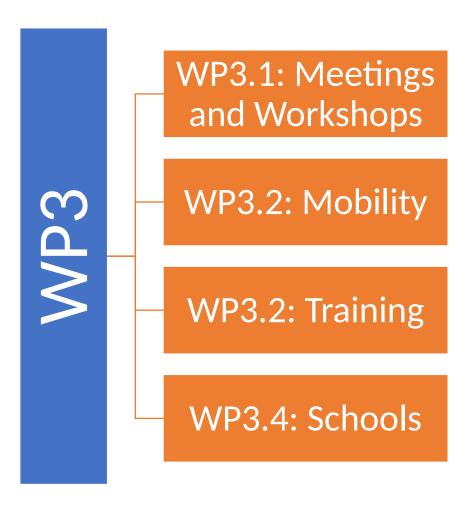
2nd SOLARNET General Assembly

Francesca Zuccarello











WP3.1 Meetings

Time	Title	Location	Org.
Y2/Q3 (5-9 Oct 2020) POSTPONED	Sun and Society	Italy (Venice)	UToV
Y3/Q3 (20 -24 Sept 2021)	The Many Scales of the Magnetic Sun	Germany (Potsdam, (Telegrafenber)	AIP
Y4/Q3 (Sept 2022)	The Sun as a paradigm in astrophysics	Italy (Catania)	UNICT





Meeting 1 Sun and Society

Organizer: Francesco Berrilli (UToV)





This project has received funding from the European

under grant agreement No 824135.

Union's Horizon 2020 research and innovation programme

SOLARNET International Conferences
Sun and Society

Date: 5 - 9 October 2020 POSTPONED TO 2021

Venue: Venice International University (VIU) in the island of San Servolo (Venice) (?)

 DUE TO THE STILL ON-GOING COVID-19 PANDEMIA, WE NEED TO REVISE THE ENTIRE MEETING SCHEDULE





WP3.1 Meetings: PROPOSAL FOR A NEW SCHEDULE

Time	Title	Location	Org.
20 -24 SEPT 2021	The Many Scales of the Magnetic Sun	Germany (Potsdam, (Telegrafenber)	AIP
May 2022 or September 2022	Sun and Society + The Sun as a paradigm in astrophysics	Italy (place TBD)	UToV + UNICT







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Workshops





SOLARNET - Call for Proposals for Workshop Organization in Solar **Physics**

CURRENT ISSUE Y

Posted by Tirtha Som | March 31, 2020 | General news

Proposals are hereby invited under the SOLARNET Programme "Network activities to foster synergistic collaborations" for the organization of Workshops. The topics of the Workshops should reflect newly emerging topics in the field of high-resolution solar physics

EC funds (up to a maximum of 10,000 €) will be provided to support organizational costs and travel expenses for invited speakers and travel grants for young

Applications are welcome at any time during the execution of this project, with two deadlines per year: June 30th and December 31st. The selection of the granted proposals will be announced on July 15th and January 15th.

Information details on the application procedure, nationality rules, and other requirements are available at: https://solarnet-project.eu/Call-for-Workshop-Organization.

Two deadlines per year: June 30th and December 31st.

The selection of the granted proposals is announced on July 15th and January 15th.

Proposals are handled by the **SOLARNET** Workshop **Evaluation Committee.**

Composition of the SOLARNET Workshop Evaluation Committee:

- Francesco Berrilli, UNITOV, Italy
- Markus Roth, KIS, Germany
- Meetu Verma, AIP, Germany
- Francesca Zuccarello, UNICT, Italy





WP3.2: Mobility of ESRs and senior researchers (Lead: UNICT)

WP3.2 is aimed at promoting visits of **PhD students**, **young post-docs** and **senior researchers** at host institutions.

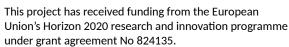
- ☐ Periodic Calls (2 Calls per year)
- \Box Evaluation of the applicant's proposals by a Committee (MEC)
- ☐ 30 FSRs and 15 senior researchers
- Funds for this activity: 120 k€

Members of the Mobility Evaluation Committee

Michele Bianda, IRSOL, Switzerland Robertus von Fay-Siebenburgen, U. of Sheffield, UK Peter Gomory, AISAS, Slovakia Arnold Hanslmeier, U. of Graz, Austria Sarah Matthews, UCL-MSSL, UK Francesca Zuccarello, UNICT, Italy











WP3.2: Mobility of ESRs and senior researchers (Lead: UNICT)

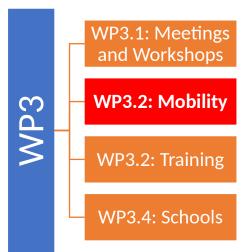
- **1st Mobility Call**: April 15th, 2019 (number of applications received: 7 ESRs and 1 Senior Researcher);
- **2nd Mobility Call**: October 15th, 2019 (number of applications received: 11 ESRs and 4 Senior Researcher);
- **3rd Mobility Call**: April 15th, 2020 (number of applications received: 8 ESR);
- 4th Mobility Call: Call Postponed

Several ESRs and Senior Researchers granted with the 3rd

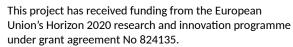
Mobility Call had to interrupt and/or postpone their stays at

the Host Institutions

(Covid-19 pandemia effects)











WP3.2: Mobility of ESRs and senior researchers (Lead: UNICT)

- Decision agreed during the SOLARNET Mid-Term Review Meeting: due to the Covid-19 pandemia, Mobility Calls are suspended till when the situation will improve.
- We should consider a new possibility: Mobility through remote mentoring
- Another goal to be reached: promote mobility and exchange between scientific institutions and industrial partners









WP3.3: Training for Solar Observers — A week above the clouds (Lead: KIS)

	WP3.1: Meetings and Workshops
P3	WP3.2: Mobility
>	WP3.2: Training
	WP3.4: Schools

Status	Time	Activity	Lecturers	Location	Org.
Done	Y1 (5 – 9 <u>August</u> 2019)	Solar telescopes GREGOR and VTT	A. Ramos (IAC) C. Fischer (KIS) C. Kuckein (AIP) A. Leonard (Aperio Software Ltd.) R. Schlichenmaier (KIS) W. Schmidt (KIS) N. Vitas (IAC)	Canarian Islands	KIS
Cancelled due to COVID 19	Y2 (Summer 2020 <u>)</u>	Solar telescopes GREGOR and VTT	TBD	Canarian Islands	KIS
Organisation to be planned	Y3 (Summer 2021)	Solar telescopes GREGOR and VTT	TBD ???	Canarian Islands	KIS
Organisation to be planned	Y4 (Summer 2022)	Solar telescopes GREGOR and VTT	TBD	Canarian Islands	KIS





WP3.4: Summer / Winter Schools (Lead: UNICT)

- O Expected number of participants in each School: ~ 25-30 ESRs.
- EC funds, per event: (20 k€/event), are provided to support organizational costs and travel expenses for young researchers and invited speakers.

	Time	Schools	Location	Org.		
f n	(<u>9 - 1</u> 4 Sept 2019)	Solar spectropolarimetry: From real to virtual observations	Switzerland (Lugano)	USI/IRSOL		
r	POSTPONED TO 25 - 29 JANUARY 2021 (ON-LINE)	A holistic view of the solar atmosphere – combining space and ground-based observations	UK (MSSL)	MSSL/UCL		
) e	POSTPONED to August 30 -September 3, 2021	High-resolution solar observations	Austria (Graz)	UNIGRAZ		
I	May 2021 [] postponed to APRIL 2022	Solar corona - complex research from ground-base and space	Slovakia (Tatranska- Lomnica)	AISAS		
r I	May 2022 [] postponed to SEPTEMBER 2022	Solar atmospheric dynamics - From waves to instabilities and jets	Hungary (GSO, Gyula)	USFD		







- **Date: 9 14 September 2019**
- The School provided an introduction to modern spectropolarimetry, forward modeling, simulations, and virtual observations.
- There were practical sessions, in which the students could work on codes.
- **Visits to the observing facilities at IRSOL and the supercomputer facilities at CSCS in Lugano.**
- Applications: 31
- Attending students: 25 (6 females, 19 males)
- SOC: Luca Belluzzi, Michele Bianda, Rolf Krause, Maria G.C. Nestola, Renzo Ramelli, Oskar Steiner, Francesca Zuccarello



WP3.4: Schools

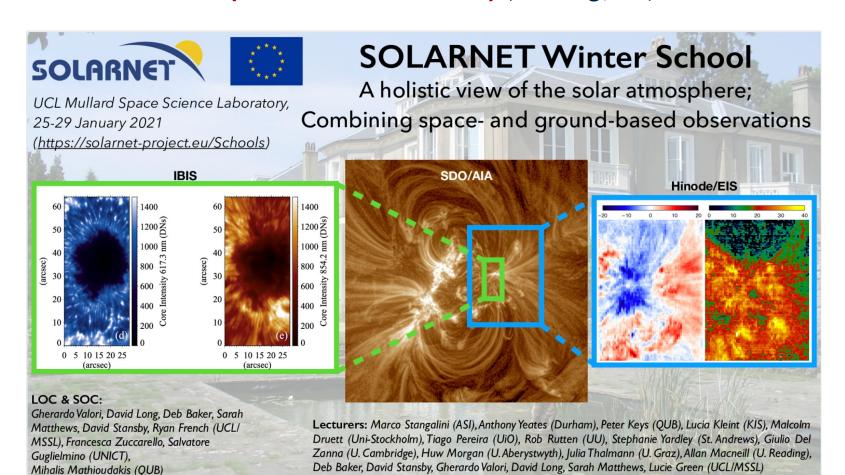






School n.2: "A holistic view of the solar atmosphere – combining space and ground-based observations" January 25-29, 2021

UCL - Mullard Space Science Laboratory (Dorking, UK) - On-line









School n.2: "A holistic view of the solar atmosphere – combining space and ground-based observations" January 25-29, 2021

UCL - Mullard Space Science Laboratory (Dorking, UK)

A holistic view of the solar atmosphere - combining space and ground-based observations

Online from MSSL 25th to 29th of January, 2021

Theory and instrumentation

NB: UK time (UTC+00:00)

	Mon 25	Tue 26	Wed 27	Thu 28	Fri 29
Topic	Magnetic field	Optically thick	Optically thin	Connection Science	Obs. Proposal and career
9:30 – 11:00	T1 Magnetic field (GB AO)	T3 GB opt. thick Halpha	T5 Opt thin & Chianti	T7 Low-corona and Helicity	T9 Write observation proposal
	Marco Stangalini	Malcom Druett	Giulio del Zanna	Julia Thalmann	Sarah Matthew
11:30-13:00	T2 Magnetic field (SB global models)	T4 SB opt. Thick iris	T6 Opt thin & Chianti	T8 Plasma Connectivity	T10 Career and outreach
	Anthony Yeates	Tiago Pereira	Giulio del Zanna	Allan Macneill	Stephanie Yardley Lucie Green
14:00-15:30	H1 Image reconstruction	H3 Analysis of IRIS data	H5 EIS AIA	H7 Sunpy/Heliopy	Evaluation questionnaire
	Peter Keys	Tiago Pereira	Deb Baker	David Stansby	END
			Andy S. H. To – Ryan French		_
16:00-17:30	H2 Observing with GREGOR	H4 AIA-GB alignement	H6 Image processing DEM MGN	H8 SolO coronal models	
	Lucia Kleint	Rob Rutten	Huw Morgan	Gherardo Valori	

Hands-on session

SOC:

- Gherardo Valori
- Sarah Matthews
- Michail Mathioudakis
- Francesca Zuccarello
- David Long
- Deborah Baker



2nd SOLARNET School (fully on-line): General resources

Zoom

Lectures took place using the Zoom platform, with 4 of the 8 hands-on lectures using the **Zoom 'breakout rooms' feature for group exercises**.

- SLAC channel for discussing and sharing information (a place for exchanging information that can build in a more stable discussion forum, i.e., on technical aspects of the hands-on with dedicated channel to IDL and Python).
- Google folder with lectures slides and material
- * Wonder room for off-lecture time (a platmform for online socialization, where users are represent by icons and can chat individually and in group, sharing video and audio).
- Menti.com for interactive pools
- OPINIO for SOLARNET questionnaire





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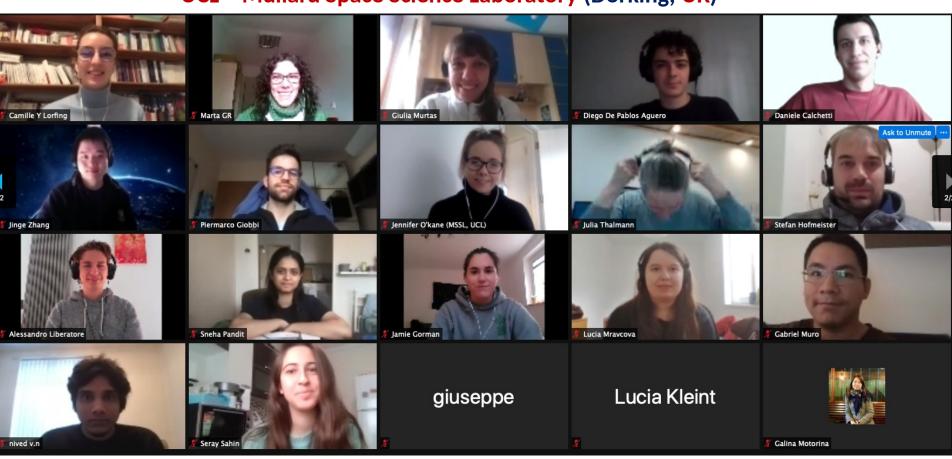






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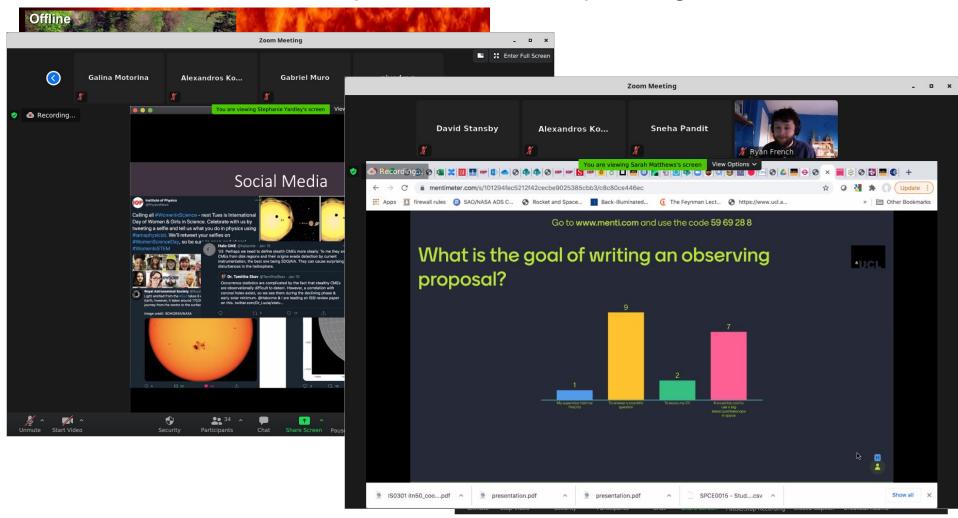




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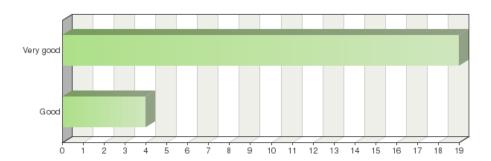




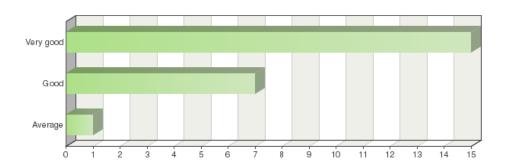


School 2: Results of the Questionnaire (23 answers)

How would you qualify the activities, scientific presentations and discussions at the School/Training?



Has the School/Training contributed to a significant enhancement of your knowledge on the addressed topics?

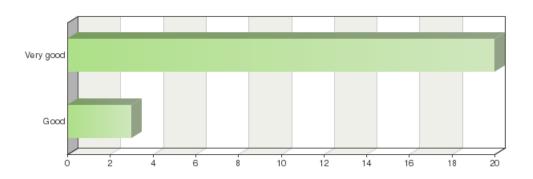




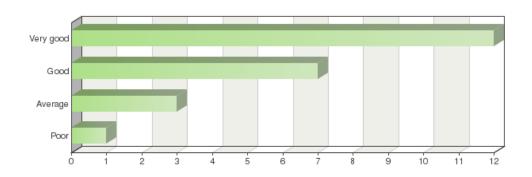


School 2: Results of the Questionnaire (23 answers)

Were the lecturers available to assist students in and out of class?



How would you qualify the Training activities and/or hands-on sessions?

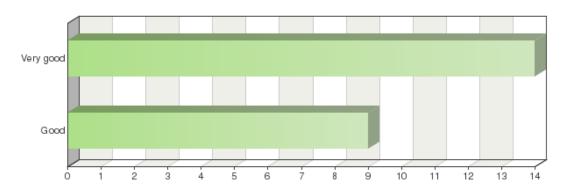




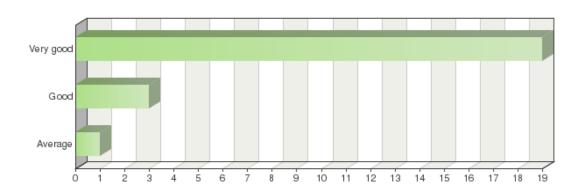


School 2: Results of the Questionnaire (23 answers)

How would you qualify the overall School/Training Programme?



How would you qualify the facilities provided (computers, conference room, Internet connection, etc.)?







School 2: Results of the Questionnaire (Free comments)

- Despite the difficult conditions, under which it took place, the School was organized very well and I am very grateful that I participated.
- All the **lectures** were very interesting and with recording available, **it is possible to revisit them and examine them in more detail, which I find very useful**.
- I particularly enjoined the Hands-on sessions and possibly I would like to have spent a bit more time on them, specifically in the form of exercises.
- However, despite the constant encouragement from the organizers/lecturers and the wide availability of resources (slack, zoom, wonder, etc.) there was not a lot of engagement of the students among themselves. Most kept mics and cameras off for the duration of the School and had very little interaction, even in the breakout rooms (where there was no recording).
- Some suggestions: to partition the exercises (or the needed info) among the students of each group to force more interactions, the lecturers could ask at the beginning of their talk for participants to open their cameras (for the ones who did it, seemed to worked), provide some room for interaction (exercises or discussion) that is not recorded but still part of the main program.







School n.3: "High-resolution solar observations" August 30 - September 3, 2020

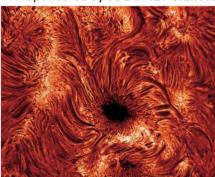
University of Graz (University Campus) (Austria)

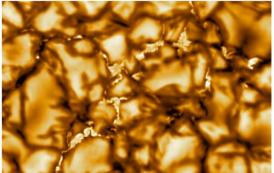


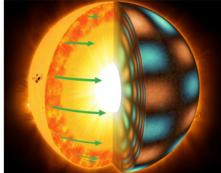
SOLARNET Summer School High Resolution Solar Physics



at Institute of Physics, University of Graz, Aug 30 – Sept 3, 2021, Austria (https://solarnet-project.eu/Schools)
Sponsored by SOLARNET Grant No 824135 under European Union's Horizon 2020 research and innovation programme.







Lecture Topics: Instrumentation for high-resolution solar physics ● High-resolution observations of the solar photosphere ●

Spectropolarimetry and the photosphere-chromosphere connection ● Solar oscillations and wave phenomena

● High spatial and spectral observation of stars ● DKIST – A new high-resolution solar telescope

LOC & SOC: Arnold Hanselmeier (Uni Graz), Markus Roth (KIS)

Lecturers: Oskar v. d. Lühe (KIS), Klaus Strassmeier (AIP), David Kuridze (Aberystwyth Uni), Markus Roth (KIS), Ales Kucera (Slovak Academy Sci), Thomas Rimmele (DKIST)





WP30 Deliverables

Number	Title	Lead	Туре	Dissem ination level	Due date
D3.3	First report on mobility programme	UNICT	Report	P	June 2020
D3.1	Meeting webpages and on-line proceedings (M1&M2)	UNICT	Websites	P	December 2020 POSTPONED to Dec 2021
D3.5	First Report on training for solar observers	KIS	R	P	December 2020
D3.7	First Report on schools	UNICT	R	P	December 2020
D3.4	Second report on mobility programme	UNICT	R	Р	December 2021
D3.2	Meeting webpages and on-line proceedings (M3&M4)	UNICT	Websites	Р	December 2022
D3.6	Second Report on training for solar observers	KIS	R	Р	December 2022
D3.8	Second Report on schools	UNICT	R	Р	December 2022





WP30 Milestones

Number	Title	Lead	Due date
MS5	First science meeting	UNICT	June 2020 -> December 2021
MS6	First week above the clouds	KIS	June 2020
MS7	First School on spectro-polarimetry	UNICT	June 2020



Items to discuss

All the activities of WP3 were impacted by Covid-19 outbreak

- Meetings:
 - New dates and merging of two Meetings (?)
- Mobility
 - Integrate industrial partners in the program
 - Promote exchange between scientific institutions and industry
 - Several stays postponed or interrupted
 - Calls have been suspended
 - New format: virtual mentoring. How to realize it? The MEC could provide some general indications and guidelines
- WP3.2: Mobility

 WP3.2: Training

 WP3.4: Schools

- Training "A week above the Clouds"
 - 2nd and 3rd (?) event cancelled
- Schools
 - 2nd School postponed to January 2021 (held on-line)
 - postponement and new dates for the other Schools

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