



Integrating High Resolution Solar Physics

WP4 Engagement, Dissemination & Communication

SOLARNET 1st General Assembly
Prague

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SMN



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**Northumbria
University**
NEWCASTLE

WP4 Objectives

A smaller version of the SOLARNET logo, consisting of a blue arc and a yellow semi-circle, positioned to the right of the title.

- **Build capacity** in the SOLARNET community through Public Engagement training;
- **Share best practice** in effectively utilising outreach to engage and educate, **engendering changes in attitudes** – both amongst consortium members and the general public;
- **Share key achievements** of the consortium and related science with the wider research community and the general public.
- Develop and maintain the plan for the dissemination and exploitation of the project's results and the data management plan.

Activities in year 1



WP4.2 Communication & dissemination – Website

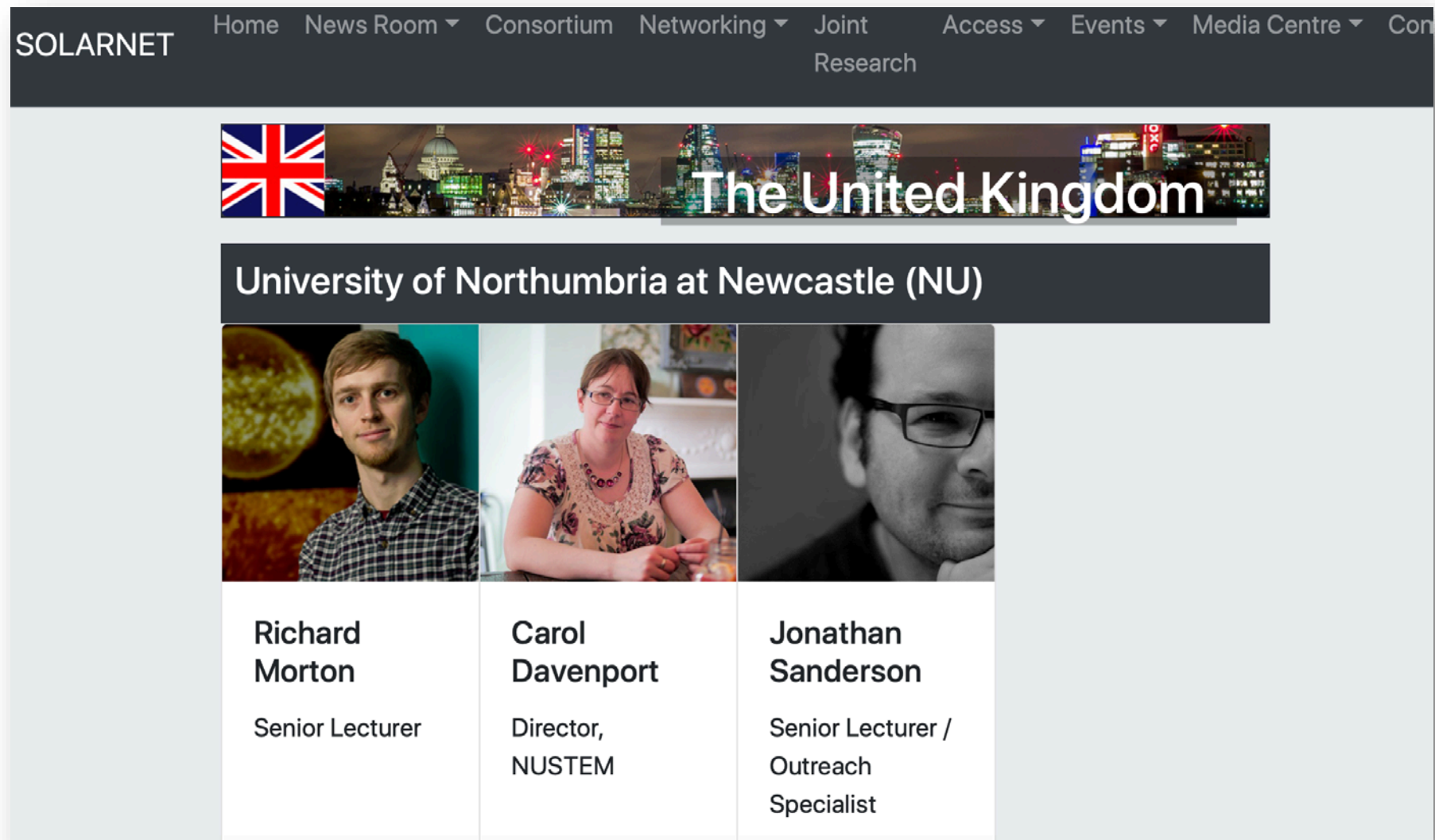
<https://solarnet-project.eu/>

Task 4.2.1 *Development of infrastructure and maintenance of SOLARNET community website*



M4.1 & D4.1 Delivery of first version of SOLARNET website

Task 4.2.4 *Delivery of online content (On-going)*

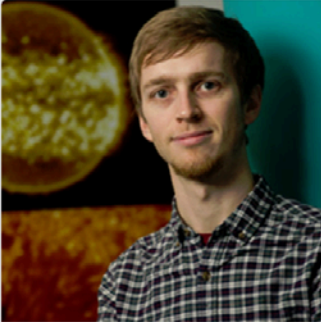


Scientist profiles: to showcase community and diverse careers in solar physics.



SOLARNET Home News Room Consortium Networking Joint Access Events Media Centre Con Research

  **The United Kingdom**

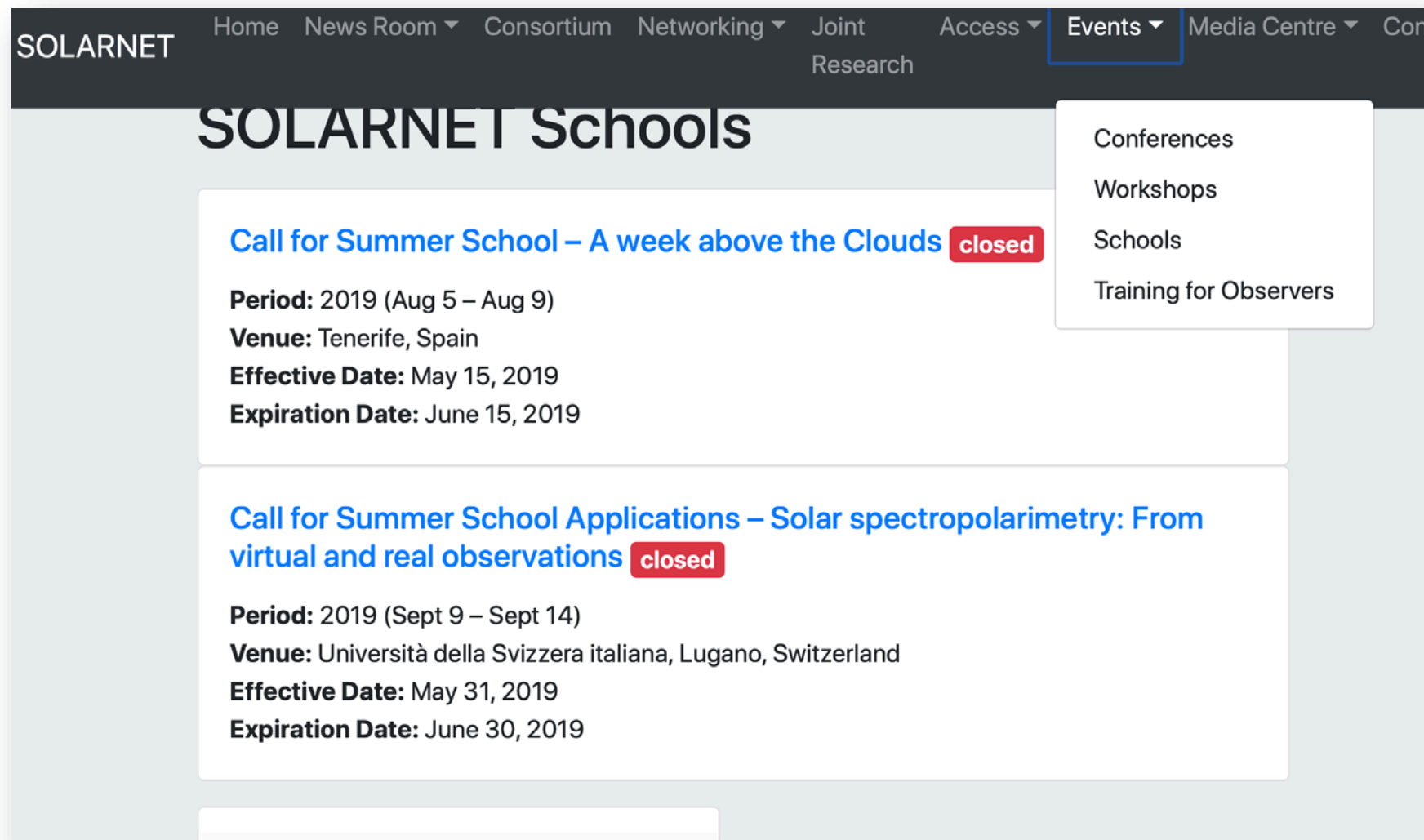
University of Northumbria at Newcastle (NU)

		
Richard Morton Senior Lecturer	Carol Davenport Director, NUSTEM	Jonathan Sanderson Senior Lecturer / Outreach Specialist

WP4.2 Communication & dissemination – **Conferences**

Task 4.2.3 *Conference platform*

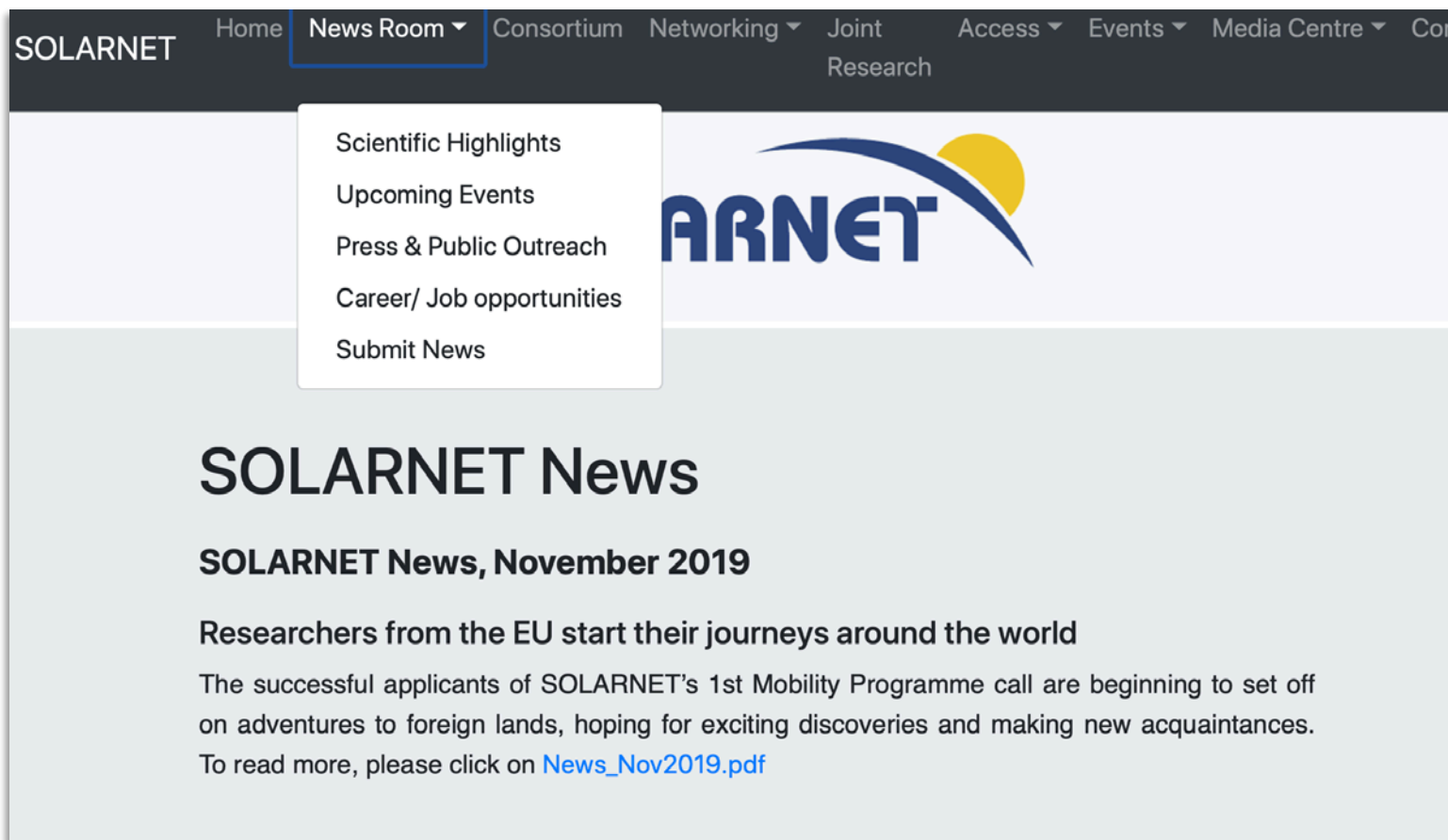
Opening and maintaining dedicated websites for all schools, workshops and conferences organized within the SOLARNET project.



The screenshot shows the SOLARNET Schools website. The navigation bar includes links for Home, News Room, Consortium, Networking, Joint Research, Access, Events, Media Centre, and Conferences. The Events menu is open, showing options for Conferences, Workshops, Schools, and Training for Observers. Two event listings are visible:

- Call for Summer School – A week above the Clouds** (closed)
 - Period:** 2019 (Aug 5 – Aug 9)
 - Venue:** Tenerife, Spain
 - Effective Date:** May 15, 2019
 - Expiration Date:** June 15, 2019
- Call for Summer School Applications – Solar spectropolarimetry: From virtual and real observations** (closed)
 - Period:** 2019 (Sept 9 – Sept 14)
 - Venue:** Università della Svizzera italiana, Lugano, Switzerland
 - Effective Date:** May 31, 2019
 - Expiration Date:** June 30, 2019

WP4.2 Communication & dissemination – News



The screenshot shows the SOLARNET website's News Room page. The navigation menu includes Home, News Room (selected), Consortium, Networking, Joint, Access, Events, Media Centre, and Con. A dropdown menu for News Room is open, listing: Scientific Highlights, Upcoming Events, Press & Public Outreach, Career/ Job opportunities, and Submit News. The main content area features the SOLARNET logo and a news article titled "SOLARNET News" with a sub-headline "SOLARNET News, November 2019". The article text reads: "Researchers from the EU start their journeys around the world. The successful applicants of SOLARNET's 1st Mobility Programme call are beginning to set off on adventures to foreign lands, hoping for exciting discoveries and making new acquaintances. To read more, please click on [News_Nov2019.pdf](#)".

Possible to submit news to the website.

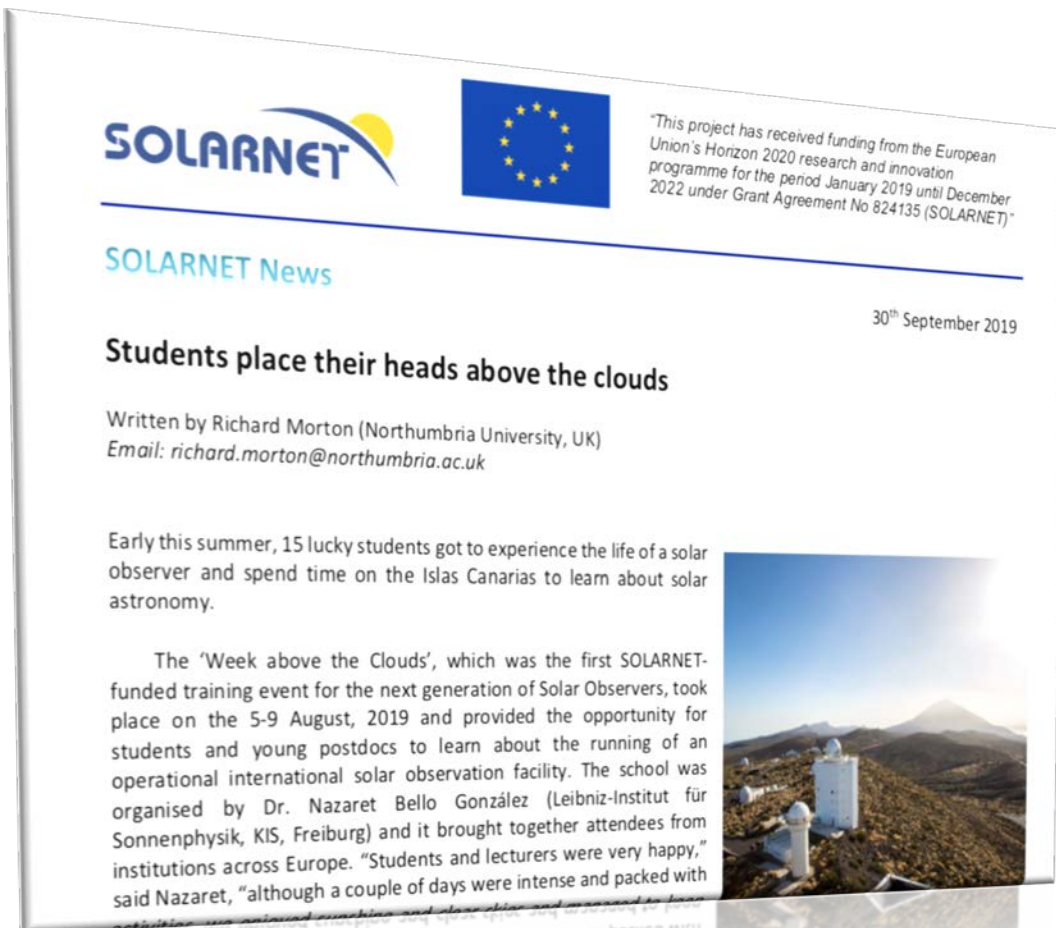
Fantastic to have a short story after:

- each SOLARNET event,
- milestones are met,
- Research publications
- Any other exciting development

News advertised more widely via social media.

Task 4.2.4 *Delivery of dynamic online content (On-going)*

WP4.2 Communication & dissemination – News



Example 'Week Above the Clouds' - Two attendees were asked for detailed comments to help write the story.

Comments also provide testimonials about the event, evidence for reporting socio-economic impact (to be used in conjunction with feedback questionnaires).



WP4.1 *SOLARNET Public Engagement Training Workshop*

- Two training workshops aimed at both *early career and senior researchers*
- Build confidence, skills & perspective for a wide range of communication activities & situations.
- First workshop will be loosely themed around engagement with schools,
- Second workshop (in 2021) having elements of collaboration masterclass.

Facilitated by highly experienced and award-winning public engagement professionals, who've worked with researchers of all levels.

Task 4.1.1 Design Continued Professional Development (CPD) workshops



1st SOLARNET Public Engagement Training Workshop

M4.2 & Task 4.1.2 *The delivery of CPD workshops & training events*

31st March – 1st April 2020, Northumbria University, Newcastle, UK

Workshop will cover:

- *Why do we want to 'engage the public with science?'*
- *Designing for evaluation, pathways to impact, and writing engagement into research bids.*
- *Contexts & approaches: the range of opportunities available for science communication.*
- *How to talk to people. Understanding your audience, and the 'communication' part of 'science communication'.*
- *Unconscious bias: implications and mitigations.*
- *Empty vessels to science capital and co-creation: developments and trends within public engagement.*

Particular emphasis on working with schools. The lessons will be applicable in a wider range of engagement contexts, however we also expect the workshop will spark the development of new classroom activities.

Public Engagement Training at Schools

Short session on Public Engagement at summer/winter schools. Promised to be delivered during at least 3 schools.

'An introduction to science communication' targeted at students and early career researchers

- **A holistic view of the solar atmosphere (UK 2020)**
- High-resolution solar observations (Austria 2020)
- **Solar corona - complex research from ground-base and space (Slovakia 2021)**
- **Solar atmospheric dynamics - From waves to instabilities and jets. (UK 2022)**

NU to deliver these sessions. Specific evaluation exercise associated with PE training.

WP4.1 'Community attitudes to Outreach'

Task 4.1.4 *Develop suitable criteria for assessing impact of CPD*

Collecting data on the *attitudes towards public engagement* across the member organisations and researchers in EU.

We would like to explore how attitudes and activities differ between countries.

Towards the end of the SOLARNET project, we will send out a similar survey to look at any changes in attitudes and activities during the SOLARNET project.

Potential for publication – 'First EU wide survey of attitudes of researchers to public engagement'.
REQUIRES community engagement – *please complete the questionnaire!*

Along with follow up surveys can be put forward as evidence for socio-economic impact.

'Community attitudes to Outreach'



<https://northumbria.onlinesurveys.ac.uk/solarnet-public-engagement-survey-2019-2>

Activities for year 2



WP4.1 Training – Progress

Task 4.1.3 Provision of resources for training, education and outreach

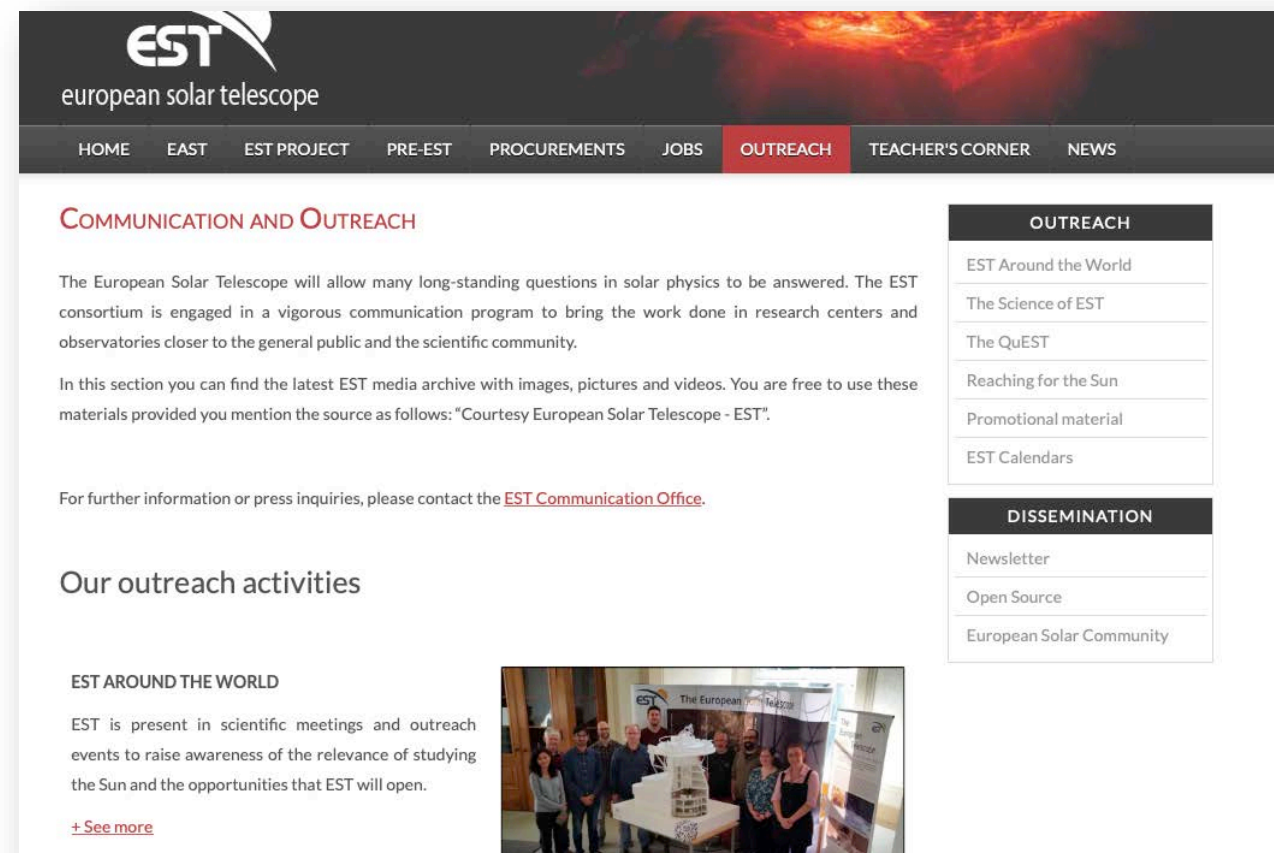
D4.2 Provide initial resources for training and outreach for consortium members

Due Month 18

Support continued community development and post-workshop activities.

Workshop content and additional training materials will be made open access online.

Looking to include presentations/ activities from partners - share best practice.



The screenshot shows the EST website with a navigation menu including HOME, EAST, EST PROJECT, PRE-EST, PROCUREMENTS, JOBS, OUTREACH (highlighted), TEACHER'S CORNER, and NEWS. The main content area is titled 'COMMUNICATION AND OUTREACH' and contains the following text:

The European Solar Telescope will allow many long-standing questions in solar physics to be answered. The EST consortium is engaged in a vigorous communication program to bring the work done in research centers and observatories closer to the general public and the scientific community.

In this section you can find the latest EST media archive with images, pictures and videos. You are free to use these materials provided you mention the source as follows: "Courtesy European Solar Telescope - EST".

For further information or press inquiries, please contact the [EST Communication Office](#).

Our outreach activities

EST AROUND THE WORLD

EST is present in scientific meetings and outreach events to raise awareness of the relevance of studying the Sun and the opportunities that EST will open.

[+ See more](#)

On the right side of the page, there are two vertical menus:

- OUTREACH**
 - EST Around the World
 - The Science of EST
 - The QuEST
 - Reaching for the Sun
 - Promotional material
 - EST Calendars
- DISSEMINATION**
 - Newsletter
 - Open Source
 - European Solar Community

At the bottom of the page, there is a photograph of a group of people standing around a table with a model of the European Solar Telescope.

Scientist profiles

Contacting individuals who expressed interest in being involved.

Provide an alternative scientist profile to be used in school outreach:

- Highlight people who work in science
- Different jobs available
- Attributes required for scientist

Printable cards to be used as part of engagement with young people.



STEM PERSON OF THE WEEK | **Sabrina Gaertner**
Instrument Scientist

Sabrina is an instrument scientist who works with particle accelerators. She is **collaborative** and has to work with different people in her team. She is a **committed** scientist responsible for operating a machine that allows her to look at the structure of liquid and glass to learn about their structure. Sabrina has to be **patient** when analysing her results.

committed **patient** **collaborative**

nustem Science & Technology Facilities Council Northumbria University

WP4.3 *Exploitation, Dissemination & Communication Plan*

D4.5 Exploitation, Dissemination & Communication Plan

Due Month 18

Covers how the consortium will disseminate activities.

Targeted audiences - from pupils, students, researchers and engineers, up to private sector, mass media and policy makers

Draft document underway, requires input from other WP's esp. around facilities & archives– *How do you plan to disseminate/communicate your activities?*

REMINDER: At the end of the grant we need to detail our Communication and Dissemination activities – how to collect information and monitor activities?

Sun & Society

Conference - The objective of this meeting is to create and tighten links between solar science and society by involving heliophysics scientists, stakeholders and economists.



An article for popular science magazine (or editorial) that looks at Sun & Society, including discussions from all parties.

Timed with meeting.

Help/Ideas welcome!

EU Solar Physics (EUSP) Nuggets

Bite-size science article

Potentially modelled on [UKSP nuggets](http://www.uksolphys.org/uksp-nuggets/)
(<http://www.uksolphys.org/uksp-nuggets/>)

Short article that summarises recent work
(published/unpublished)

- 7-8 paragraphs
- 2/3 pictures

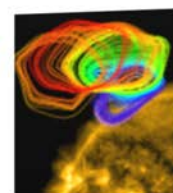
Typical UKSP Nuggets get 100 views in first week. Over lifetime ~1000 views.



[88. Excitation of coronal loop oscillations by coronal rain](#)

by Petra Kohutova and Erwin Verwichte (Warwick).

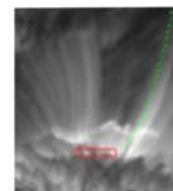
Thermal instability and coronal rain formation can excite coronal loop oscillations.



[87. Giant solar loops and LOFAR radio observations](#)

by Hamish Reid and Eduard Kontar (Glasgow).

Using LOFAR's high resolution to map accelerated electrons in a colossal coronal loop.



[86. Evidence of recurrent reconnection driving fan-shaped jets](#)

by Aaron Reid, Mihalis Mathioudakis (QUB), Vasco Henriques (UiO), Tanmoy Samanta (Peking).

Photospheric activity drives chromospheric jets in a sunspot.



[85. The role of the magnetic field in sunquakes](#)

by Lucie Green, Gherardo Valori, Francesco Zuccarello, Sarah Matthews (MSSL/UCL), Sergei Zharkov (Hull) and Salvo Guglielmino (Catania).

Magnetic lensing could determine the location of sunquakes.



[84. The first NuSTAR microflare](#)

by Paul Wright and Iain Hannah (Glasgow)