



## Fibre Optic Nonlinear Technologies [FONTE] - A European Industrial Doctorate [GA766115]

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### Dissemination level

PU	Public	X
CO	Confidential, only for members of the consortium (including Commission Services)	

## Project Details

Grant Agreement	766115
Project Acronym	FONTE
Project Title	Fibre Optic Nonlinear TEchnologies
Call Identifier	H2020-MSCA-ITN-2017
Project Website	<a href="http://fonte.astonphotonics.uk">fonte.astonphotonics.uk</a>
Start of the Project	1 June 2018
Project Duration	48 months

## Consortium



## EC Funding



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## EXECUTIVE SUMMARY

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This deliverable details how the FONTE project website was created with the main focus to provide key public information regarding the project. It describes the tools used to develop its content and illustrates its initial layout and content. The website will function as the main vehicle of external communications and public dissemination of the project activities and results. We foresee that over time the website will evolve to accommodate additional areas of interest to the FONTE consortium and the wider public.

The FONTE website, [fonte.astonphotonics.uk](http://fonte.astonphotonics.uk), was set up at an early stage of the project and has been live online since 5 Sept 2018, Month 4 of the project.

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## LIST OF ACRONYMS/ABBREVIATIONS

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EC	European Commission
EID	European Industrial Doctorates
ESR	Early Stage Researcher
FONTE	Fibre Optic Nonlinear Technologies
AiPT	Aston Institute Of Photonic Technologies

# 1. REGISTRATION AND BASIC DESIGN ELEMENTS OF THE WEBSITE

Project FONTE officially started on 1 June 2018, when the **project domain** <https://fonte.astonphotonics.uk/> was registered with a hosting service. The website name makes reference to the Aston Institute Of Photonic Technologies (AiPT), the project coordinator, whose own website is at <https://astonphotonics.uk/>.

The development of the website was carried out in-house at AiPT and the basic design was decided after extensive research on the web for websites of other European Industrial Doctorates. The theme *Tesseract* was chosen for the project website appearance as it allows extensive manipulation of all main design elements of the website and is responsive to different screen sizes, thus appearing equally attractive on different devices such as computer, tablet and smartphone.



Figure 1: Tesseract theme is fully responsive and suitable for both smartphone and computer

The **colour scheme** of the website was individualised by changing all design elements of the layout, such as drop down menus, buttons, etc, to the trademark colours of the coordinator Aston Institute Of Photonic Technologies (AiPT): Pantone 576 and Pantone 390.



The repeated use of Pantone 576 and Pantone 390 throughout the website give it a coherent look and links it visually back to the parent site of Aston Institute Of Photonic Technologies (AiPT), the coordinator of Project FONTE.

The top-level **menu bar** and **drop down menu** in AiPT colours:

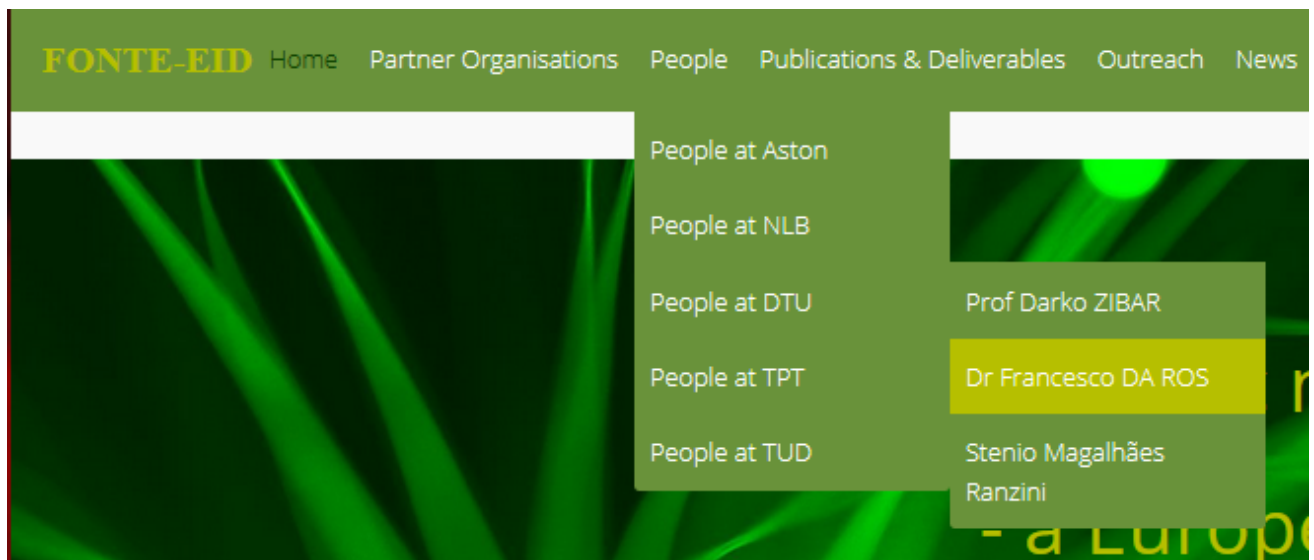
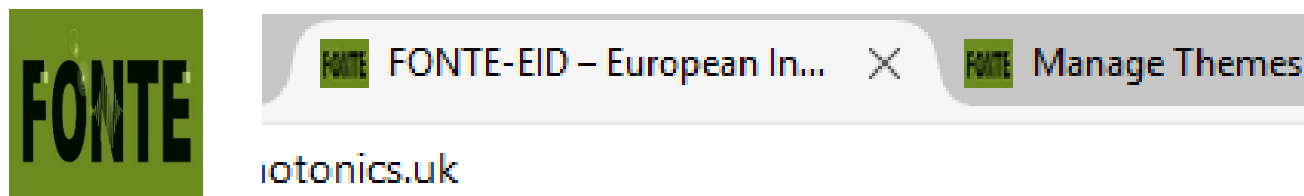


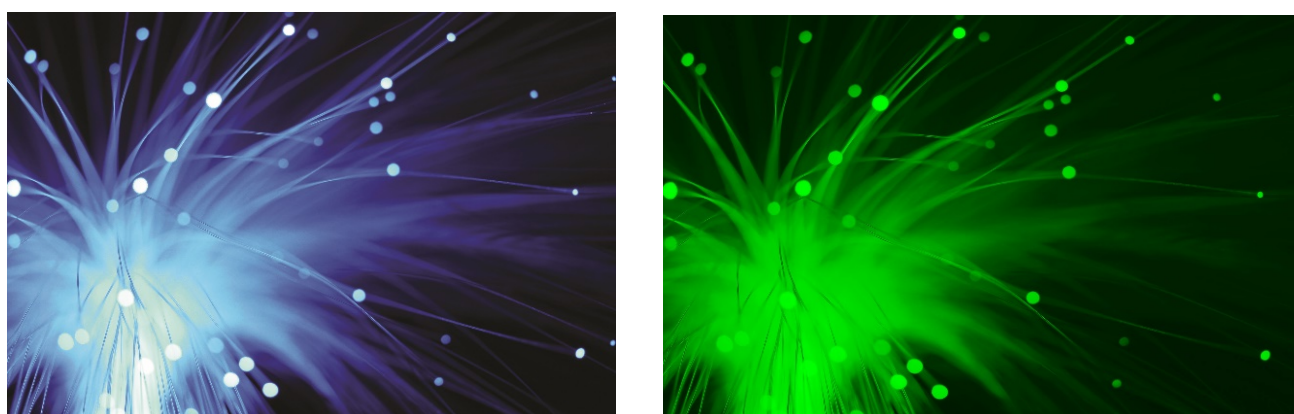
Figure 2: Drop-down menu of FONTE website

The FONTE project icon in AiPT colour Pantone 576 appears as the **site identity icon** on each webpage tab:



*Figure 3: Site identity icon*

The fibre laser image on the landingpage was **recoloured** to emulate the AiPT colours:



*Figure 4: Landing page image (original and recoloured)*

**Function buttons** throughout the website make use of the AiPT colours:



*Figure 5: Website function buttons*



## 2. LANDING PAGE AND MENU BAR

The **landing page** of the FONTE website features three special interest areas (*Our Project*; *Our Partners*; *Our ESRs*), giving quick access to the scientific background of the project, the consortium partners and its Early Stage Researchers. The *Read more* button incorporated into each area hyperlinks to FONTE-internal webpages as appropriate, with the *Our ESRs* special interest area additionally highlighting the current recruit drive. In future, when all ESRs have been recruited, it is envisaged that the 2<sup>nd</sup> and 3<sup>rd</sup> special interest area could be combined into '*Consortium*', making way for a featured '*New*' area, highlighting items such as the latest research output, upcoming conferences and outreach activities. All pages of the website are extensively hyperlinked both internally and externally, making access to any given point of interest possible through multiple routes.

Finally, the landing page prominently displays the logo of the European Commission, the Grant Agreement number of the project, as well as acknowledges the funding received from the EC.



Figure 6: Landing page of <https://fonte.astonphotonics.uk/>

The **menu bar** at the top of the website features the standard tabs giving access to extended drop-down menus, as expected for this kind of EC-funded Initial training network, with links to both the project scientific background (tab: *Home*), the consortium (tab: *Partner Organisations*), and its individual researchers (tab: *People*), as well as project output (tab: *Publications & Deliverables*; tab: *Outreach*), *News* and an option to contact the consortium (tab: *Contact*), as well as an area private accessible to registered and logged-in consortium members only (tab: *Private*).

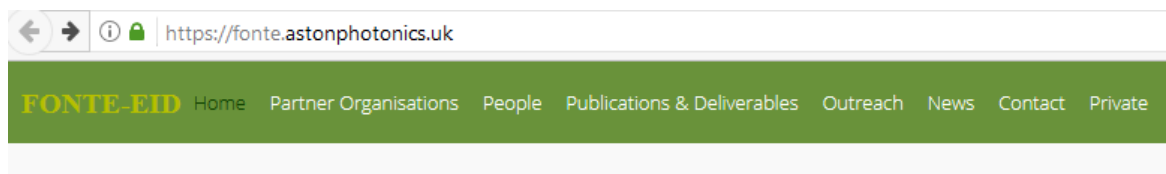


Figure 7: FONTE website top level menu bar

### 3. HOMEPAGE

The **FONTE Homepage/About** introduces in broad terms the research area and gives details about the overarching aims of the project. The page provides links to the consortium partners (with logos and hyperlinks to partner websites), and refers to the nature of the Innovative Training Network with a link to the official MSCA website. The page also features a map locating the 5 project partners within the European context.

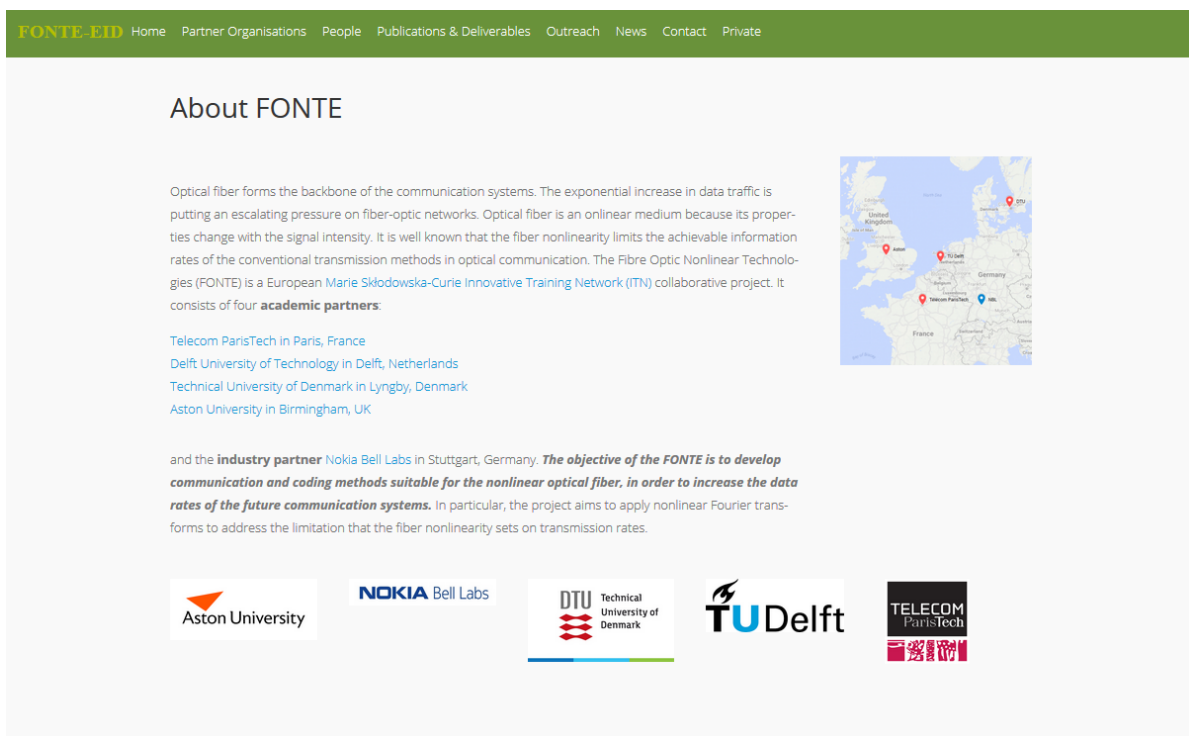


Figure 8: The FONTE Home page

## 4. PARTNER ORGANISATIONS

A large section within the FONTE website is devoted to its **Partner Organisations**. Clicking the *Partner Organisations* tab in the (top level) menu bar brings up a visual slider with images of partner organisations and buttons hyperlinking externally to the partners own top-level websites.

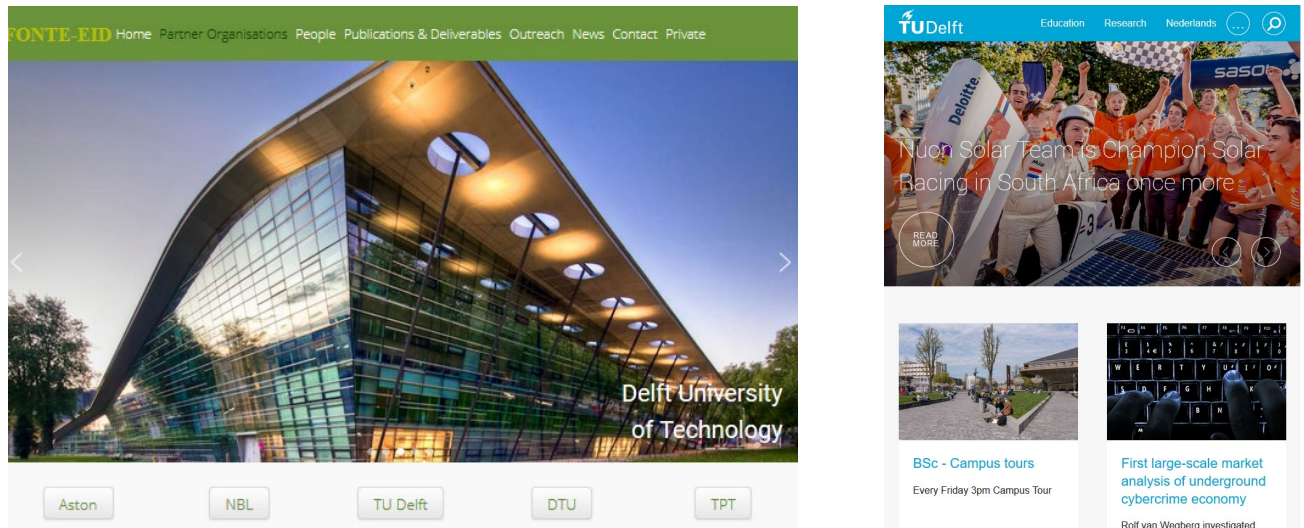


Figure 9: Buttons for Partner Organisations on the FONTE website hyperlink to partners' own websites

Alternatively, and from within the FONTE website via the drop-down menu, users can access FONTE-internal webpages dedicated to each of our partner organisations, featuring image(s), a general description of the organisation, key research facilities, infrastructure and equipment available to the scientists.

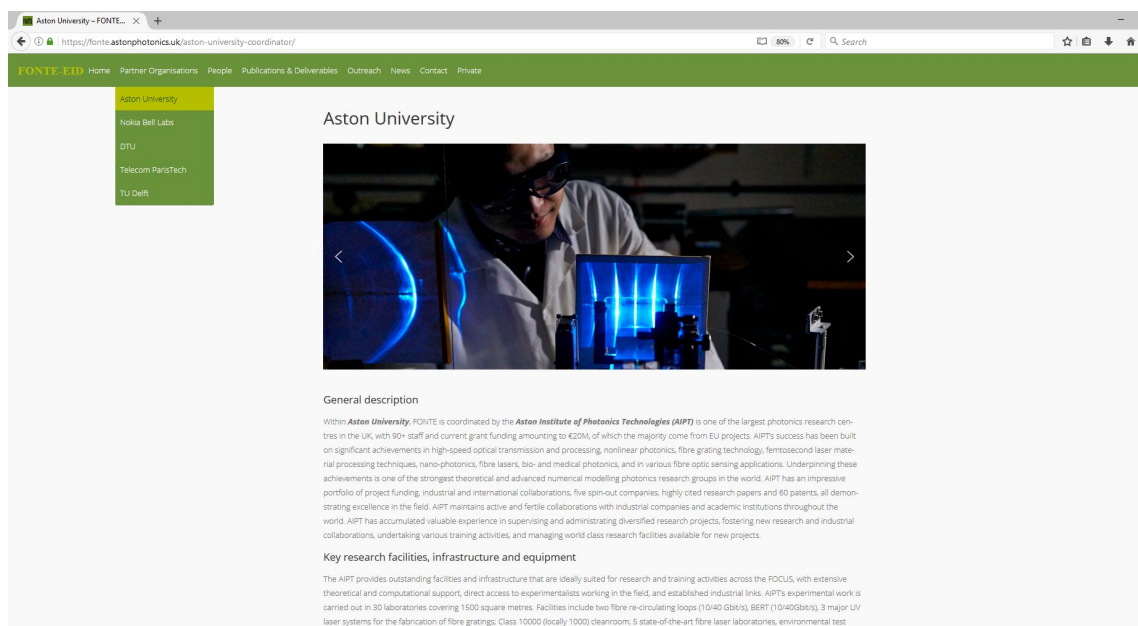


Figure 10: Example of an internal webpage for a FONTE Partner

## 5. PEOPLE

An extensive and expanding area of the website features the **people** behind the FONTE project.

Clicking on the *People* tab in the menu bar brings up a summary page of all people currently associated with FONTE and their role within (with place holders for the yet-to-be recruited Early Stage Researchers).

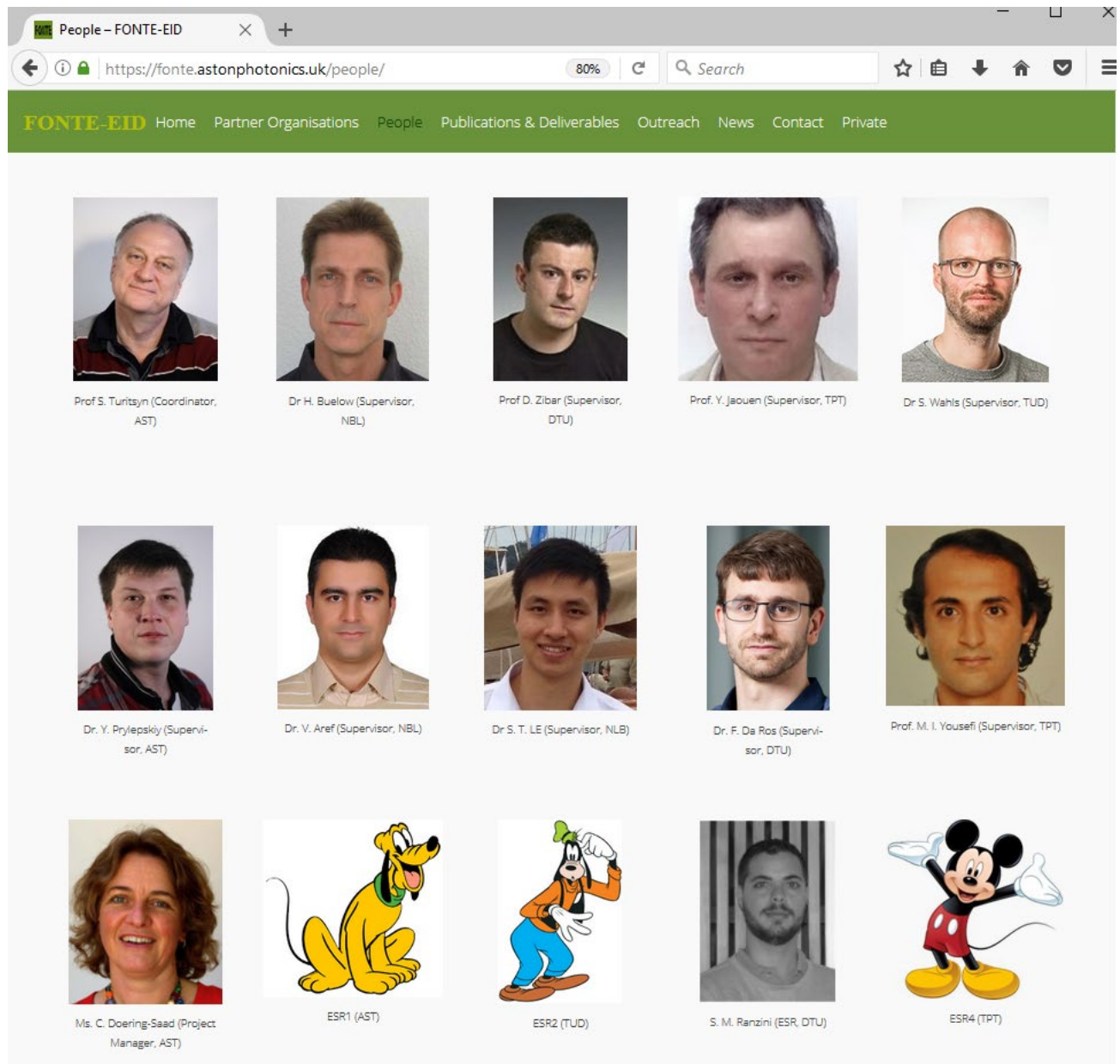


Figure 11: Peoples tab (top level)



People - FONTE EDI | Dr Francesco DA ROS - FO., + |

https://fonte.astrophotonika.it/francesco-da-ros/ 85% | Search

FONTE EDI Home Partner Organizations People Publications & Deliverables Outreach News Contact Private

## Dr Francesco DA ROS

**Francesco Da Ros** received his B.Sc. degree in information engineering from Università degli Studi di Padova, Italy, in 2008. He also received a dual M.Sc. degree in communication engineering from Università degli Studi di Padova, Italy, and Technical University of Denmark, Denmark, in 2011 and the Ph.D. degree from the Technical University of Denmark in 2014. Between 2013 and 2014, he spent a seven-month research stay at Fraunhofer Institute for Telecommunications, Heinrich-Hertz Institute, Germany. Between 2016 and 2017, he has been working as a post-doc researcher at the Department of Photonics Engineering at DTU with the Center for Silicon Photonics for Optical Communications (SPCO) focusing on all-optical signal processing and nonlinear compensation techniques for optical transmission systems. During the period, he spent a month working at the action Institute of Photonics Technologies (APIT) on optical phase conjugation under Prof. Andrew Miles. It is currently involved within the ERC consolidated grant FRECOM under Prof. Danilo Zibar, focusing on the inverse scattering theorem and machine learning techniques applied to coherent communications. Dr. Da Ros has co-authored more than 100 journal and conference papers, he is a QSA Young Professional Volunteer member, an IEEE Young Professional member and has been serving as technical subcommittee member of the Conference on Lasers and Electro Optics (CLEO) since 2018.

### Recent publications:

- Hu, F. Da Ros, M. P. Fu, F. K. Ingelsrud, E. P. da Silva, Md. Noorunnazam, A. Arima, Y. Sakaki, T. Matsuo, Y. Miyamoto, L. Ottaviano, E. Sennemo, P. Guan, D. Zibar, M. Galli, K. Vinod, T. Moroka, and L. K. Overlie, "Single-source chip-based frequency combs enabling extreme parallel data transmission" *Nature Photonics*, 17, 494-499 (2018).
- C.K. Medeiros Dantas, F. Da Ros, E. P. da Silva, R.T. Jones, and D. Zibar, "Optimization of DR-QMAM transmission using cooperative evolutionary genetic algorithm," *Journal of Lightwave Technology*, 35, 2450-2462 (2018)
- P. Guan, F. Da Ros, M. Liljevalm, N.-K. Kiyler, H. Ku, K.M. Rage, M. Galli, T. Moroka, and L.K. Overlie, "Scalable WDM phase regeneration in a single phase sensitive amplifier through optical time reversal," *Nature Communications*, 10, 49 (2018).
- S. Gialanri, A. Pengo, E.P. da Silva, F. Da Ros, and D. Zibar, "Optical polarization nonlinear Fourier transform-based optical communication system," *Optica*, 5, 263-270 (2018).
- F. Da Ros, A. Gajda, E. Lebig, E. P. da Silva, A. Pezdek, P.D. Grouard, A. Mai, K. Peternann, L. Zimmermann, M. Galli, and L.K. Overlie, "Optical polarization wavelength conversion of 16-QAM signals in a single silicon waveguide with lateral p-i-n diode," *Photonics Research*, 6, 1-7 (2018).
- F. Da Ros, M.P. Varpio, E.P. da Silva, M. P. L. Ottaviano, H. Ali, E. Sennemo, S. Forchhammer, D. Zibar, M. Galli, K. Vinod and L.K. Overlie, "Characterization and optimization of a high-efficiency AlGaIn-GaN-InGaAs-based wavelength converter for 64- and 256-QAM signals," *Journal of Lightwave Technology*, 35, 3750-3757 (2017)

hompage

Figure 12: Details of FONTE participants, linked to either an internal FONTE webpage or external professional site

People at Aston - FONTE... X +

https://fonte.astonphotonics.uk/people-at-aston/

FONTE-ED Home Partner Organisations People Publications & Deliverables Outreach News Contact Private

People at Aston


People at NLB


People at OTU


People at TPT

People at TUO

FONTE people at Aston University (Birmingham, UK)

  
Prof S. Turpin (Coordinator  
AST)

  
Dr V. Rymer (Business  
Manager AST)

  
Ms C. Downing (Project  
Manager AST)


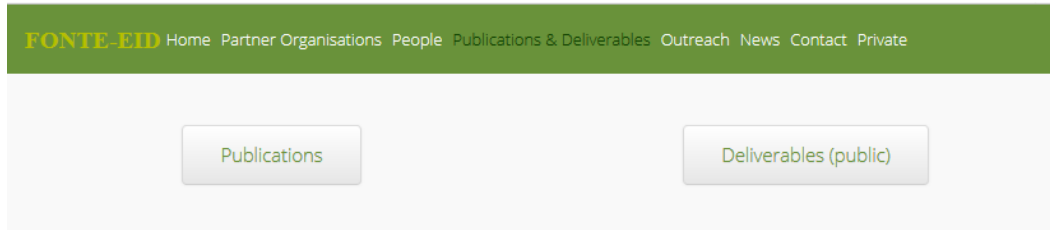
  
ESP (AST)

Figure 13: FONTE people can be accessed through multiple routes on the website

## 6. PUBLICATIONS AND DELIVERABLES

Public **research output** of the project will appear on the *Publications & Deliverables* tab.



Clicking on either button takes the user to an up-to-date list of project output, with the ability to download any Open Access research papers directly from the FONTE website via the 'Read full text' button. Where appropriate, a link to the paper in a repository will also be provided.

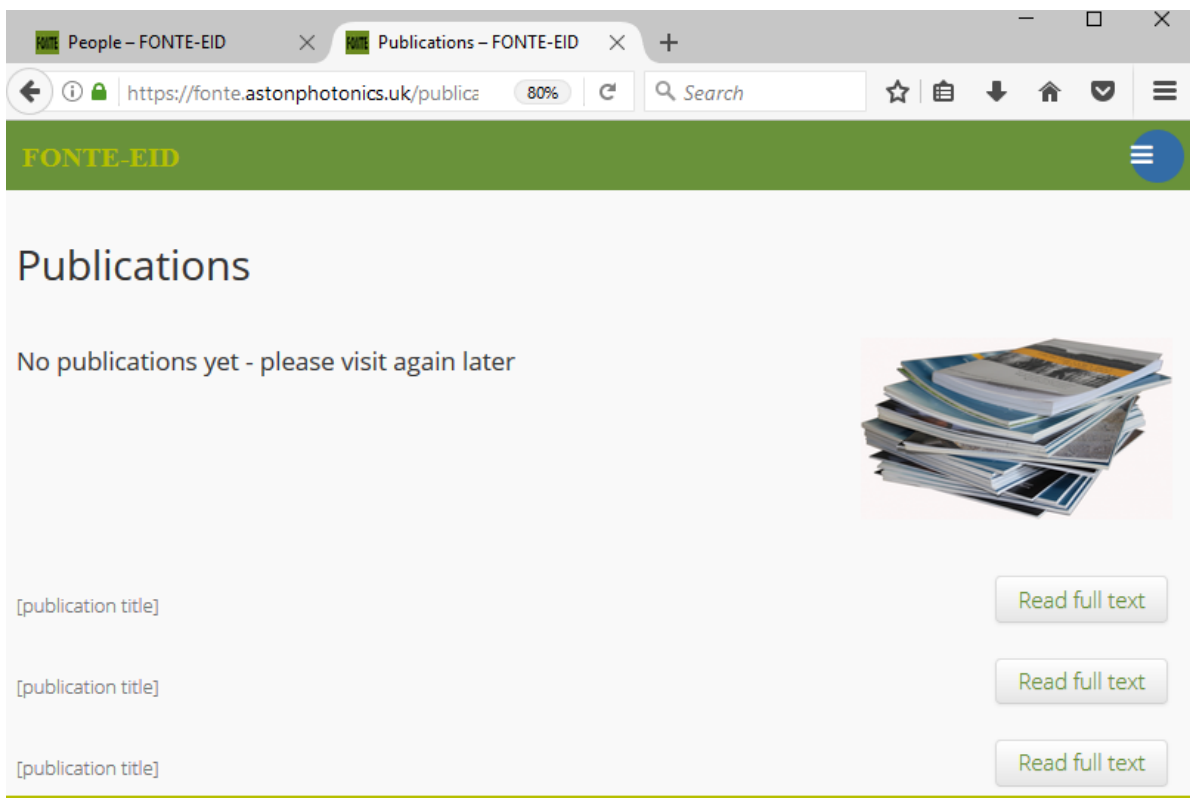


Figure 14: All (open access) research output will be made available soon after acceptance of the manuscript

## 7. OUTREACH

**Outreach** is an important and integral part of the FONTE project, with all Early Stage Researchers undertaking mandatory outreach activities. These activities will be featured on the *Outreach* tab of the project website, including links to videos produced, appearances in the media and reports on activities completed. The page is currently populated with placeholder material, such as a video produced by Aston Institute of Photonic Technologies (AiPT), which organised the large-scale outreach project *LightFest* at Birmingham Library (UK) in 2015, attracting over 12,000 visitors. Other featured (past) outreach activities lead by MSCA fellows at AiPT are a TV-appearance of ESRs in the TRIPOD-ITN and specially created ‘sugar rocks’ - a popular seaside sweet in the UK - to help explain fibre lasers to children.

It is hoped that examples such as these will inspire the FONTE Early Stage Researchers to lead and participate in similar outreach activities and showcase research enabled through European Commission funding to a wide audience.

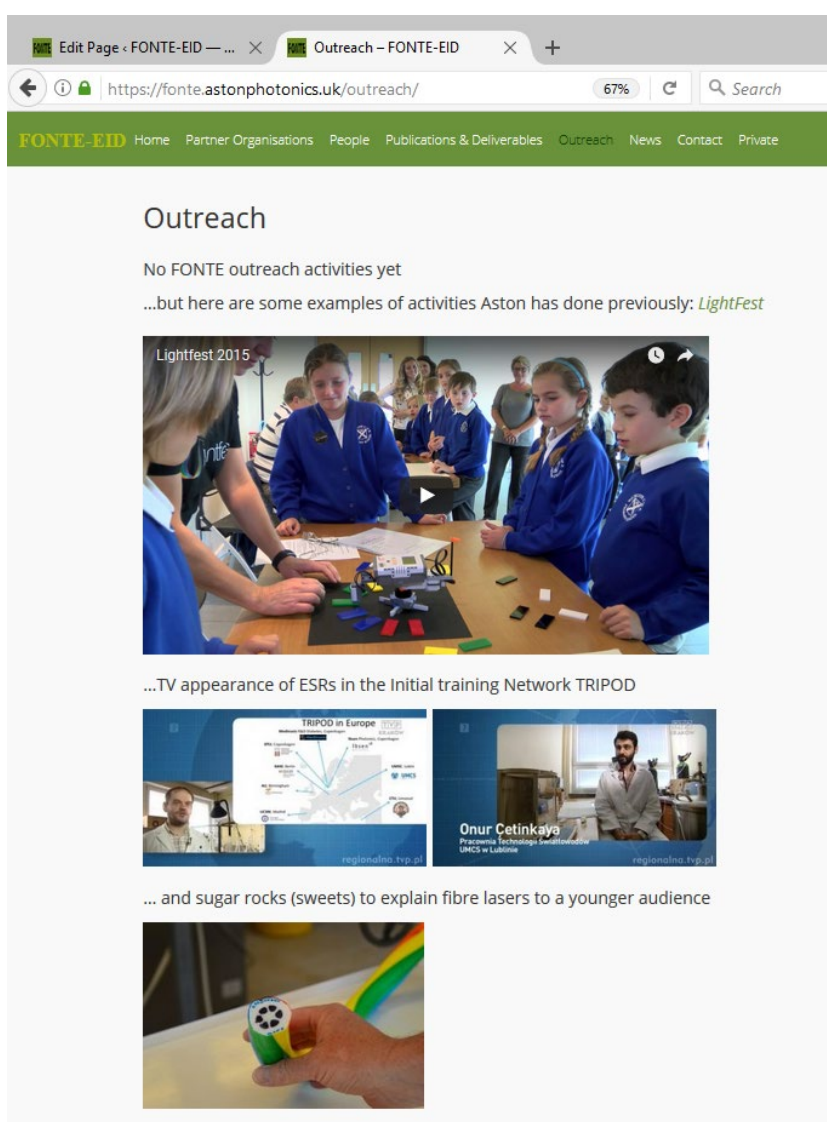


Figure 15: Example of an Outreach activity lead by AiPT/ Aston University previously

## 8. NEWS

The penultimate public tab of the FONTE website is populated with **news** from the project. In future details about training events, conferences etc. will also appear on this webpage.

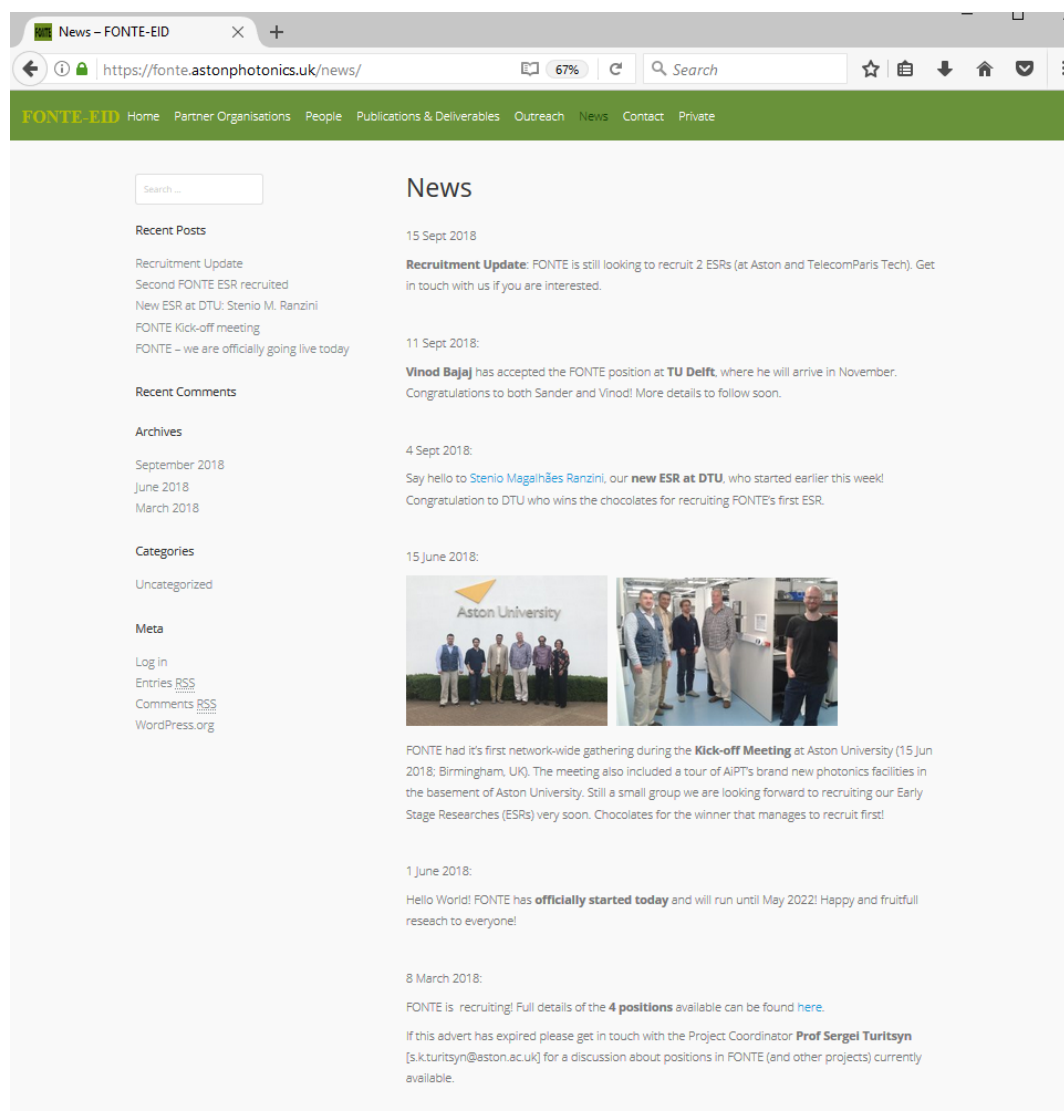


Figure 16: The News tab - project updates and continuous news feed



## 9. CONTACT FORM

The tab *Contact* features a **contact form** enabling the user to get in touch with the FONTE consortium. To prevent spamming emails originating from the website a reCAPTCHA feature was integrated into this form. Once completed the contact form is automatically directed to the FONTE Project Manager's email.

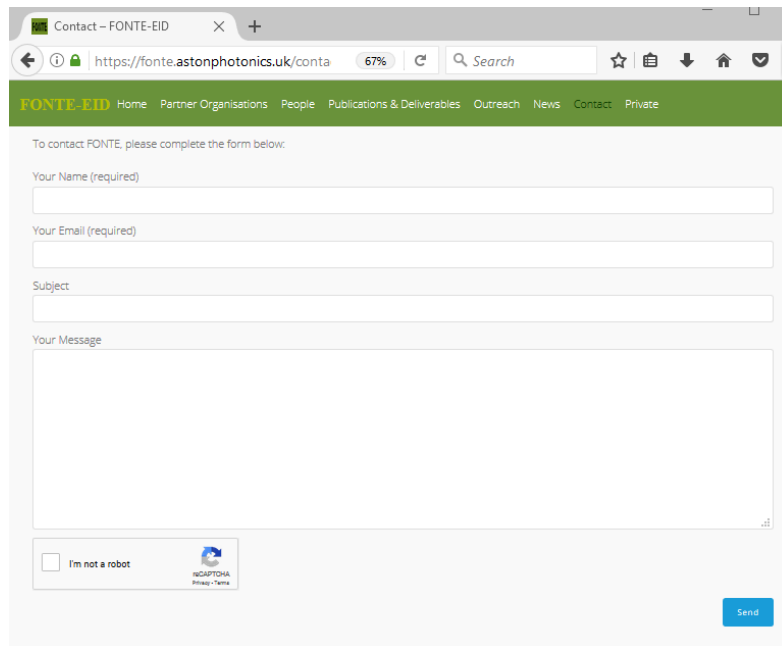
A screenshot of a web browser showing the 'Contact - FONTE-EID' page. The browser's address bar shows 'https://fonte.astonphotonics.uk/conta' with a 67% zoom level. The page has a green header with the 'FONTE-EID' logo and navigation links: Home, Partner Organisations, People, Publications & Deliverables, Outreach, News, Contact, and Private. The main content area is white and contains a form titled 'To contact FONTE, please complete the form below:'. The form has four input fields: 'Your Name (required)', 'Your Email (required)', 'Subject', and 'Your Message' (a larger text area). Below the 'Your Message' field is a reCAPTCHA widget with the text 'I'm not a robot' and a small image of a robot. A blue 'Send' button is located at the bottom right of the form.

Figure 17: Contact form with reCAPTCHA feature

## 10. PRIVATE AREA

The final Private tab in the FONTE menu bar gives access to the restricted area of the website, where registered and logged-in members of the FONTE consortium can access sensitive information, templates and non-public deliverables. In due course this area will also be utilised to grant access to restricted information to the EC Project Officer and external project reviewers.

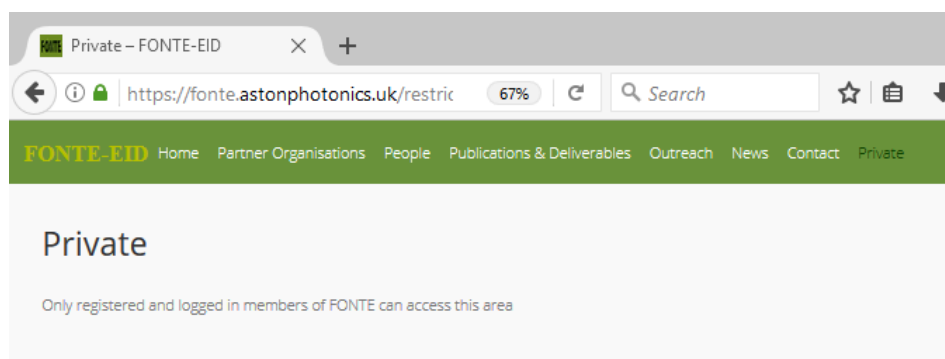


Figure 18: The restricted area of the website can be accessed by consortium members only