

# **PPTAP Detectors Workshop**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **Introduction and european context**

*Friday, 4 June 2021 13:30 (20 minutes)*

**Presenter:** VIVARELLI, Iacopo (University Of Sussex)

**Session Classification:** Calorimetry

Contribution ID: 2

Type: **not specified**

## **UK ongoing R&D and perspective**

*Friday, 4 June 2021 14:15 (25 minutes)*

**Presenter:** Prof. WATSON, Nigel (University of Birmingham )

**Session Classification:** Calorimetry

Contribution ID: 3

Type: **not specified**

## Discussion

*Friday, 4 June 2021 14:40 (20 minutes)*

**Session Classification:** Calorimetry

Contribution ID: 4

Type: **not specified**

## Welcome

*Thursday, 3 June 2021 10:00 (2 minutes)*

**Presenter:** BONGS, Kai (The University of Birmingham)

**Session Classification:** Quantum Technologies

Contribution ID: 5

Type: **not specified**

## **Quantum Technologies for Fundamental Physics Overview & ECFA Roadmap TF5 "Quantum sensors"**

*Thursday, 3 June 2021 10:02 (15 minutes)*

**Presenter:** Prof. SHIPSEY, Ian (Oxford University)

**Session Classification:** Quantum Technologies

Contribution ID: 6

Type: **not specified**

## Quantum Sensors for the Hidden Sector

*Thursday, 3 June 2021 10:17 (7 minutes)*

**Presenter:** DAW, Edward (The University of Sheffield)

**Session Classification:** Quantum Technologies

Contribution ID: 7

Type: **not specified**

## **Atom Interferometer Observatory and Network**

*Thursday, 3 June 2021 10:24 (7 minutes)*

**Presenter:** BUCHMUELLER, Oliver (Imperial College London)

**Session Classification:** Quantum Technologies

Contribution ID: 8

Type: **not specified**

## Quantum Sensor Network

*Thursday, 3 June 2021 10:31 (7 minutes)*

**Presenter:** Dr BARONTINI, Giovanni (University of Birmingham)

**Session Classification:** Quantum Technologies

Contribution ID: 9

Type: **not specified**

## Quantum Enhanced Technologies for Dark Matter and Cosmology - QUEST-DMC

*Thursday, 3 June 2021 10:38 (7 minutes)*

**Presenter:** CASEY, Andrew (Royal Holloway, University of London)

**Session Classification:** Quantum Technologies

Contribution ID: **10**

Type: **not specified**

# Quantum Technology for Neutrino Mass

*Thursday, 3 June 2021 10:45 (7 minutes)*

**Presenter:** SAAKYAN, Ruben (UCL)

**Session Classification:** Quantum Technologies

Contribution ID: 11

Type: **not specified**

# Quantum Simulations for Fundamental Physics

*Thursday, 3 June 2021 10:52 (7 minutes)*

**Presenter:** WEINFURTER, Silke

**Session Classification:** Quantum Technologies

Contribution ID: 12

Type: **not specified**

## Quantum-enhanced Interferometry

*Thursday, 3 June 2021 10:59 (7 minutes)*

**Presenter:** GROTE, Hartmut

**Session Classification:** Quantum Technologies

Contribution ID: 13

Type: **not specified**

## ALPHA@CERN

*Thursday, 3 June 2021 11:06 (7 minutes)*

**Presenter:** ERIKSSON, Stefan

**Session Classification:** Quantum Technologies

Contribution ID: 14

Type: **not specified**

## Collective Excitations for Fundamental Physics

*Thursday, 3 June 2021 11:13 (7 minutes)*

**Presenter:** FUENTES-GURIDI, Ivette

**Session Classification:** Quantum Technologies

Contribution ID: 15

Type: **not specified**

## Welcome & ECFA TF4

*Friday, 4 June 2021 09:00 (20 minutes)*

**Presenter:** ROMANO, Angela (University of Birmingham)

**Session Classification:** PID and Photodetectors

Contribution ID: 16

Type: **not specified**

## **PID - Time of Flight R&D**

*Friday, 4 June 2021 09:20 (30 minutes)*

**Presenter:** BLAKE, Thomas (University of Warwick)

**Session Classification:** PID and Photodetectors

Contribution ID: 17

Type: **not specified**

## **R&D on position sensitive photon detectors**

*Friday, 4 June 2021 10:20 (30 minutes)*

**Presenter:** GAMBETTA, Silvia (The University of Edinburgh (GB))

**Session Classification:** PID and Photodetectors

Contribution ID: **18**

Type: **not specified**

## **R&D on photon detection in the noble liquids**

*Friday, 4 June 2021 10:50 (20 minutes)*

**Presenter:** ARAUJO, Henrique (Imperial College London)

**Session Classification:** PID and Photodetectors

Contribution ID: 19

Type: **not specified**

## **R&D on SiPMs in Liquid Argon Experiments**

*Friday, 4 June 2021 11:10 (20 minutes)*

**Presenter:** SZELC, Andrzej (University of Edinburgh)

**Session Classification:** PID and Photodetectors

Contribution ID: **21**

Type: **not specified**

## Discussion

*Friday, 4 June 2021 11:30 (30 minutes)*

**Session Classification:** PID and Photodetectors

Contribution ID: 22

Type: **not specified**

## **PID - RICH R&D**

*Friday, 4 June 2021 09:50 (30 minutes)*

**Presenter:** MCCANN, Michael (Imperial College)

**Session Classification:** PID and Photodetectors

Contribution ID: 23

Type: **not specified**

## HGCal

*Friday, 4 June 2021 13:50 (25 minutes)*

**Presenters:** MAGNAN, Anne-Marie (Imperial College (GB)); Prof. DAUNCEY, Paul (Imperial College London)

**Session Classification:** Calorimetry

Contribution ID: 25

Type: **not specified**

## **Session Welcome and PPTAP and ECFA**

*Thursday, 3 June 2021 15:30 (10 minutes)*

**Presenter:** PALLADINO, Kimberly (Oxford University)

**Session Classification:** Liquid and Gas Detectors

Contribution ID: 26

Type: **not specified**

## Water Cherenkov R&D

*Thursday, 3 June 2021 15:40 (10 minutes)*

**Session Classification:** Liquid and Gas Detectors

Contribution ID: 27

Type: **not specified**

## Liquid Scintillator R&D

*Thursday, 3 June 2021 15:50 (10 minutes)*

**Session Classification:** Liquid and Gas Detectors

Contribution ID: 28

Type: **not specified**

## **Noble liquid R&D**

*Thursday, 3 June 2021 16:00 (10 minutes)*

**Presenter:** MAVROKORIDIS, Kostas (University of Liverpool)

**Session Classification:** Liquid and Gas Detectors

Contribution ID: 29

Type: **not specified**

## Gas detector R&D

*Thursday, 3 June 2021 16:10 (10 minutes)*

**Session Classification:** Liquid and Gas Detectors

Contribution ID: **30**

Type: **not specified**

## Discussion

*Thursday, 3 June 2021 16:20 (40 minutes)*

**Session Classification:** Liquid and Gas Detectors

Contribution ID: **31**

Type: **not specified**

## Introduction

*Wednesday, 2 June 2021 10:00 (10 minutes)*

**Presenters:** BEVAN, Adrian (Queen Mary University of London); ROMANO, Angela (University of Birmingham); SAWYER, Craig (STFC); VILELLA, Eva (University of Liverpool); VIVARELLI, Iacopo (University Of Sussex); BONGS, Kai (The University of Birmingham); PALLADINO, Kimberly (Oxford University)

**Session Classification:** Introduction

Contribution ID: 32

Type: **not specified**

## European and UK context

*Wednesday, 2 June 2021 10:10 (20 minutes)*

**Presenter:** NEWBOLD, Dave (STFC)

**Session Classification:** Introduction

Contribution ID: 33

Type: **not specified**

## **Introduction to PPTAP**

*Wednesday, 2 June 2021 10:30 (20 minutes)*

**Presenter:** CHADWICK, Paula (Durham University)

**Session Classification:** Introduction

Contribution ID: **34**

Type: **not specified**

## **Welcome and ECFA summary/status**

*Thursday, 3 June 2021 13:30 (10 minutes)*

**Presenter:** VILELLA, Eva (University of Liverpool)

**Session Classification:** Solid State Detectors

Contribution ID: 35

Type: **not specified**

## **Silicon sensors R&D**

*Thursday, 3 June 2021 13:40 (20 minutes)*

**Presenter:** CASSE, Gianluigi (FBK - ULiv)

**Session Classification:** Solid State Detectors

Contribution ID: **36**

Type: **not specified**

## **Diamond sensors R&D**

*Thursday, 3 June 2021 14:00 (10 minutes)*

**Presenter:** OH, Alexander (University of Manchester (GB))

**Session Classification:** Solid State Detectors

Contribution ID: 37

Type: **not specified**

## **Electronics + design tools, PDKs, MPWs**

*Thursday, 3 June 2021 14:10 (10 minutes)*

**Presenter:** SEDGWICK, Iain (UKRI-STFC)

**Session Classification:** Solid State Detectors

Contribution ID: **38**

Type: **not specified**

## **Europractice**

*Thursday, 3 June 2021 14:20 (10 minutes)*

**Presenter:** WILLOUGHBY, Mark (STFC)

**Session Classification:** Solid State Detectors

Contribution ID: **39**

Type: **not specified**

## Discussion

*Thursday, 3 June 2021 14:30 (30 minutes)*

**Session Classification:** Solid State Detectors

Contribution ID: 40

Type: **not specified**

## **E&I Introduction**

*Wednesday, 2 June 2021 11:00 (20 minutes)*

**Presenters:** SAWYER, Craig (STFC); HALSALL, Rob (STFC)

**Session Classification:** Integration/DAQ

Contribution ID: 41

Type: **not specified**

## UK E&I Workshop Summary

*Wednesday, 2 June 2021 11:20 (20 minutes)*

**Presenter:** SAWYER, Craig (STFC)

**Session Classification:** Integration/DAQ

Contribution ID: 42

Type: **not specified**

## **UK R&D and perspectives - Electronics**

*Wednesday, 2 June 2021 11:40 (20 minutes)*

**Presenter:** HALSALL, Rob (STFC)

**Session Classification:** Integration/DAQ

Contribution ID: 43

Type: **not specified**

## **UK R&D and perspectives - Integration**

*Wednesday, 2 June 2021 13:30 (20 minutes)*

**Presenter:** Dr JONES, Tim (University of Liverpool)

**Session Classification:** Integration/DAQ

Contribution ID: 44

Type: **not specified**

## **UK R&D and perspectives - Interconnect**

*Wednesday, 2 June 2021 13:50 (20 minutes)*

**Presenter:** LIPP, John (UKRI - Science and Technology Facilities Council)

**Session Classification:** Integration/DAQ

Contribution ID: 45

Type: **not specified**

## **UK R&D - Facilities**

*Wednesday, 2 June 2021 14:10 (20 minutes)*

**Presenter:** DOPKE, Jens (STFC)

**Session Classification:** Integration/DAQ

Contribution ID: 46

Type: **not specified**

## Discussion

*Wednesday, 2 June 2021 14:30 (30 minutes)*

**Session Classification:** Integration/DAQ

Contribution ID: 47

Type: **not specified**

## Summaries

*Friday, 4 June 2021 15:45 (25 minutes)*

**Presenters:** BEVAN, Adrian (Queen Mary University of London); ROMANO, Angela (University of Birmingham); SAWYER, Craig (STFC); VILELLA, Eva (University of Liverpool); VIVARELLI, Iacopo (University Of Sussex); BONGS, Kai (The University of Birmingham); PALLADINO, Kimberly (Oxford University); HALSALL, Rob (STFC)

**Session Classification:** Summary & funding structures

Contribution ID: 54

Type: **not specified**

## **Funding thoughts from E&I workshop**

*Friday, 4 June 2021 15:30 (10 minutes)*

**Presenter:** SAWYER, Craig (STFC)

**Session Classification:** Summary & funding structures

Contribution ID: 55

Type: **not specified**

## Discussion & closing remarks

*Friday, 4 June 2021 16:15 (45 minutes)*

**Session Classification:** Summary & funding structures

Contribution ID: 56

Type: **not specified**

## **EFCA Review (TF9)**

*Wednesday, 2 June 2021 15:30 (10 minutes)*

**Session Classification:** Training

Contribution ID: 57

Type: **not specified**

## **Hardware training experience perspective from UoL: past, present and future**

*Wednesday, 2 June 2021 15:40 (10 minutes)*

**Presenter:** BEVAN, Adrian (Queen Mary University of London)

**Session Classification:** Training

Contribution ID: 58

Type: **not specified**

## Discussion

*Wednesday, 2 June 2021 15:50 (1 hour)*

**Aim:** collect views from the community that can feed into the evidence that will help formulate aspects of the training part of the PPTAP roadmap.

**Identify:** Anecdotal examples of excellence from across the UK, positive experiences, opportunities and ideas for how to ensure that both the next generation of researchers are trained to a world leading standard, and that existing ECR's have the appropriate opportunities to up-skill, while respecting the constraints on the system: i.e. the need to prepare for new generations of particle physics experiment design and construction work.

**Session Classification:** Training