

**UK HEP Forum 2020:
Quantum leaps to the dark
side**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Monday, November 9, 2020 9:15 AM (15 minutes)

Presenter: NEWBOLD, David (University of Bristol / Rutherford Appleton Laboratory)

Contribution ID: 2

Type: **not specified**

Quantum technology landscape in the UK

Monday, November 9, 2020 9:30 AM (35 minutes)

Presenter: SHIPSEY, Ian (Oxford University)

Contribution ID: 3

Type: **not specified**

A network of clocks to measure the stability of fundamental constants

Monday, November 9, 2020 11:15 AM (35 minutes)

Presenter: BARONTINI, Giovanni (Univ. of Birmingham)

Contribution ID: 4

Type: **not specified**

AION

Monday, November 9, 2020 10:15 AM (35 minutes)

Presenter: BUCHMUELLER, Oliver (Imperial College)

Contribution ID: 5

Type: **not specified**

Quantum Enhanced Superfluid Technologies for Dark Matter and Cosmology

Monday, November 9, 2020 2:00 PM (35 minutes)

Presenter: CASEY, Andrew (RHUL)

Contribution ID: 6

Type: **not specified**

Quantum Sensing for the Hidden Sector

Monday, November 9, 2020 2:45 PM (35 minutes)

Presenter: DAW, Edward (University of Sheffield)

Contribution ID: 7

Type: **not specified**

Quantum-Enhanced Interferometry for New Physics

Tuesday, November 10, 2020 9:15 AM (35 minutes)

Presenter: GROTE, Hartmut (Cardiff University)

Contribution ID: 8

Type: **not specified**

Determination of Absolute Neutrino Mass Using Quantum Technologies

Tuesday, November 10, 2020 10:00 AM (35 minutes)

Presenter: SAAKYAN, Ruben (UCL)

Contribution ID: 9

Type: **not specified**

Quantum Simulators for Fundamental Physics

Tuesday, November 10, 2020 11:00 AM (35 minutes)

Presenter: WEINFURTNER, Silke (University of Nottingham)

Contribution ID: **10**

Type: **not specified**

Student talks (5+2min each)

Session Classification: Students talks (5+2min each)

Contribution ID: 11

Type: **not specified**

Development of the European Strategy

Tuesday, November 10, 2020 2:45 PM (35 minutes)

Presenter: ELLIS, Keith (IPPP)

Contribution ID: 12

Type: **not specified**

Ultra-light dark matter

Wednesday, November 11, 2020 9:15 AM (35 minutes)

Presenter: CHADHA-DAY, Francesca (Durham University)

Contribution ID: 13

Type: **not specified**

Dark energy as seen from [the] cosmological side

Wednesday, November 11, 2020 10:00 AM (35 minutes)

Presenters: NOLLER, Johannes; NOLLER, Johannes

Contribution ID: 14

Type: **not specified**

Fundamental Physics from Gravitational Waves

Wednesday, November 11, 2020 1:45 PM (35 minutes)

Presenter: ELLIS, John (King's College London)

Contribution ID: 15

Type: **not specified**

Long-lived particles at the LHC

Wednesday, November 11, 2020 2:30 PM (35 minutes)

Presenter: BOYD, Jamie (CERN)

Contribution ID: **16**

Type: **not specified**

Long-lived particles

Wednesday, November 11, 2020 11:45 AM (35 minutes)

Presenter: MCCULLOUGH, Matthew (Cambridge)

Contribution ID: 17

Type: **not specified**

Student talk prize and farewell

Wednesday, November 11, 2020 3:15 PM (10 minutes)

Contribution ID: 18

Type: **not specified**

First direct measurement of the CP nature of the Yukawa coupling between the Higgs and tau leptons

Tuesday, November 10, 2020 1:40 PM (7 minutes)

Presenter: HASSANSHAHI, MohammadHassan (Imperial College London)

Session Classification: Students talks (5+2min each)

Contribution ID: 19

Type: **not specified**

Neutrino-Mediated Forces as a Window to New Physics

Tuesday, November 10, 2020 1:47 PM (7 minutes)

Presenter: BOLTON, Patrick (University College London)

Session Classification: Students talks (5+2min each)

Contribution ID: 20

Type: **not specified**

Least-Informative Priors for Neutrinoless Double-Beta Decay

Tuesday, November 10, 2020 1:54 PM (7 minutes)

Presenter: VAN GOFFRIER, Graham (University College London)

Session Classification: Students talks (5+2min each)

Contribution ID: 21

Type: **not specified**

MAGIS-100 at Fermilab: 100m atom interferometric quantum sensor

Tuesday, November 10, 2020 2:01 PM (7 minutes)

Presenter: Ms HAWKINS, Leonie (University of Liverpool)

Session Classification: Students talks (5+2min each)

Contribution ID: 22

Type: **not specified**

Astrophysical and cosmological sources of gravitational waves

Wednesday, November 11, 2020 11:00 AM (35 minutes)

Presenter: NISSANKE, Samaya (University of Amsterdam)

Contribution ID: 23

Type: **not specified**

2HDMs to a model independent scanner

Presenter: BYERS, Ciara (University of Southampton)

Session Classification: Students talks (5+2min each)

Contribution ID: 24

Type: **not specified**

Effective Theory of Freeze-in Dark Matter

Tuesday, November 10, 2020 2:08 PM (7 minutes)

Presenter: BARMAN, Basabendu (IIT, Guwahati)

Session Classification: Students talks (5+2min each)

Contribution ID: 25

Type: **not specified**

Low energy electron recoil searches with the LZ experiment

Tuesday, November 10, 2020 2:15 PM (7 minutes)

Presenter: LEASON, Elizabeth (University of Edinburgh)

Session Classification: Students talks (5+2min each)

Contribution ID: 26

Type: **not specified**

The Dark Machines Group

Tuesday, November 10, 2020 2:22 PM (7 minutes)

Presenter: DAVIES, Joe (Queen Mary University of London)

Session Classification: Students talks (5+2min each)