



Imperial College
London

DMUK MEETING – WELCOME

Indico: <https://indico.cern.ch/event/1189888/>

Henrique Araújo

22nd September, 2022

DMUK@Imperial, 2022



Agenda

10:00	Welcome	<i>Henrique Araujo</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	10:00 - 10:10
	Boulby Underground Laboratory: plans for development of facilities and science	<i>Sean Palling</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	10:10 - 10:30
11:00	Direct Dark Matter searches with the DarkSide-20k experiment	<i>Dr Ioannis Manthos et al.</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	10:30 - 10:50
	Update on dark matter searches using NaI from the COSINE-100 experiment	<i>Robert Neal</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	10:50 - 11:10
12:00	Recent physics results from NEWS-G	<i>Patrick Knights</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	11:10 - 11:30
	First Results and Status of the LUX-ZEPLIN (LZ) Experiment	<i>Amy Cottle</i>
12:00	Break: Lunch	
	<i>Level 2 Foyer, Blackett Laboratory</i>	12:00 - 13:00

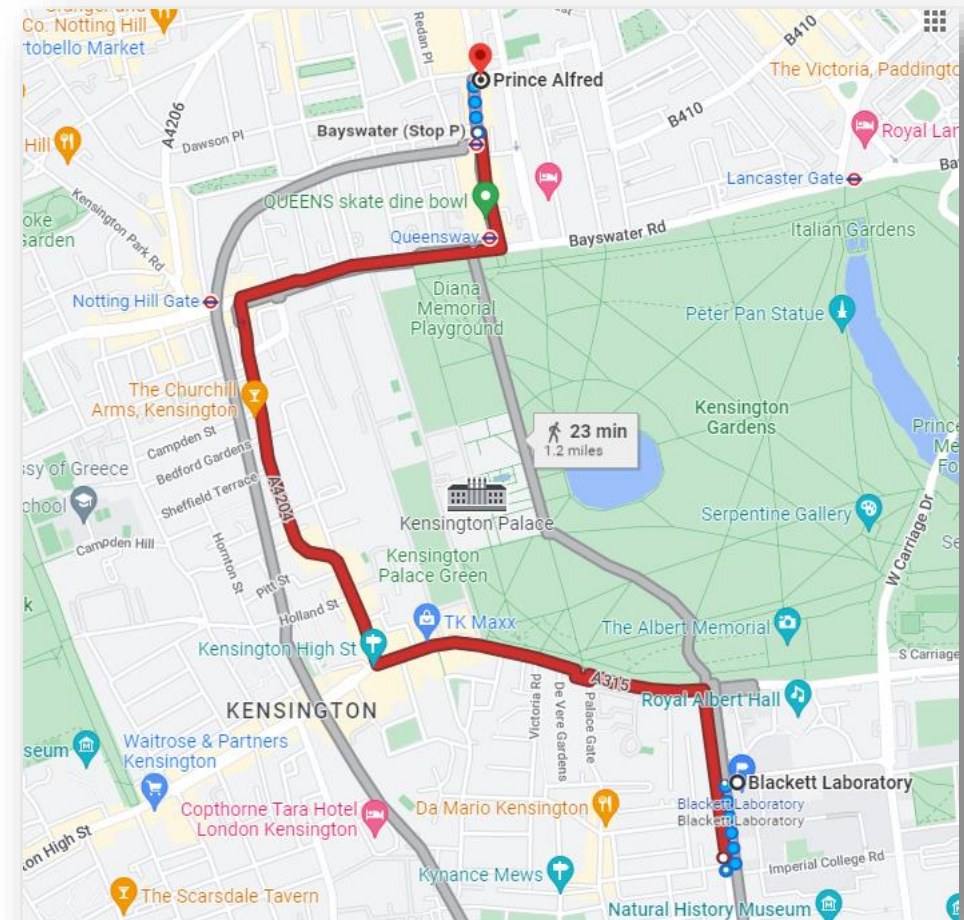
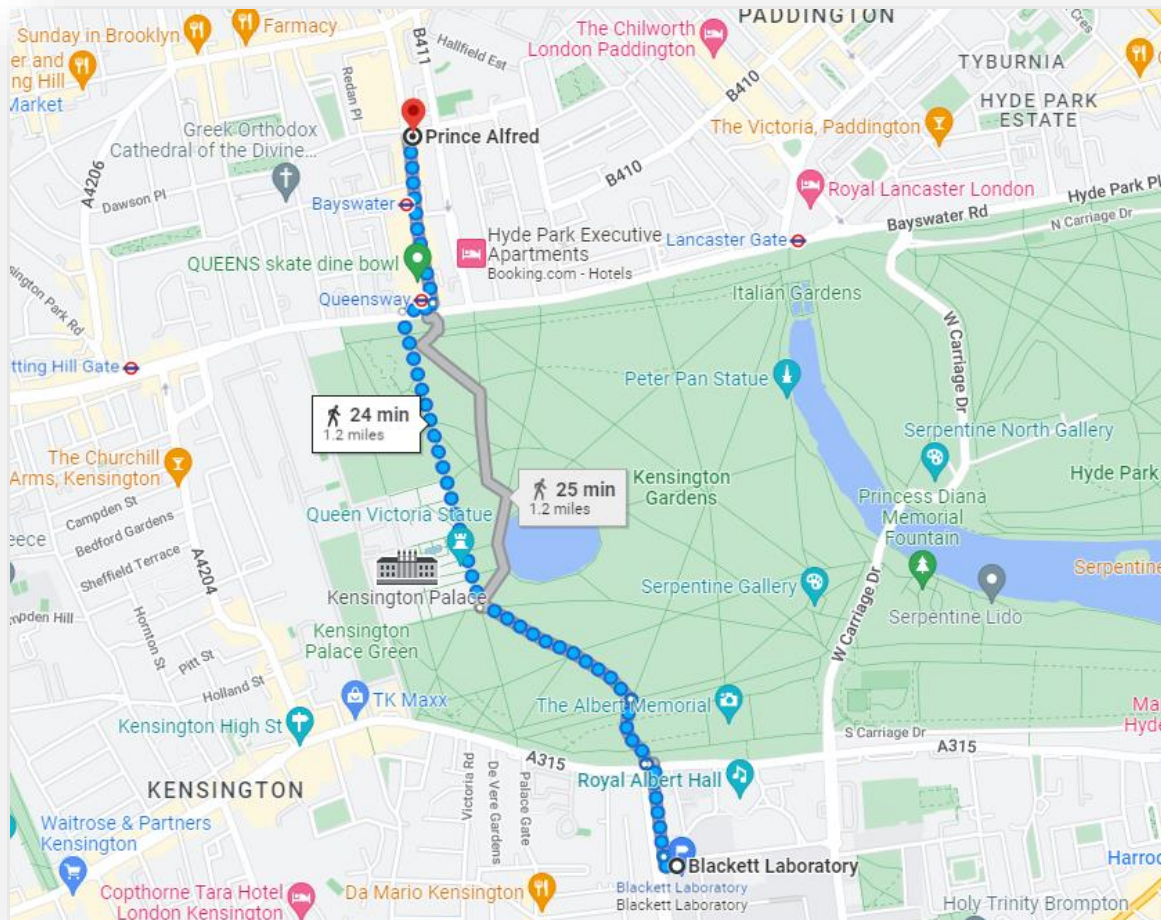
13:00	An update on Quantum Sensing for the Hidden Sector	<i>Ed Daw</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	13:00 - 13:20
	A new search for dark matter axions using quantum technologies	<i>Jack Devlin</i>
14:00	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	13:20 - 13:40
	QUEST-DMC: Simulation studies for the detection of sub-GeV dark matter with a superfluid ^3He calorimeter.	<i>Paolo Franchini</i>
	BREAD: Broadband Reflector Experiment for Axion Detection	<i>Jesse Liu</i> 
15:00	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	14:00 - 14:20
	AION: the Atom Interferometer Observatory and Network	<i>Richard Hobson</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	14:20 - 14:40
16:00	Dark matter searches using levitated optomechanics	<i>Robert S James</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	14:40 - 15:00
	Break: Tea & coffee	
17:00	<i>Level 2 Foyer, Blackett Laboratory</i>	15:00 - 15:30
	Migdal effect: New insights and updated predictions	<i>Dr Christopher McCabe</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	15:30 - 15:50
16:00	The MIGDAL experiment at the NILE facility of the Rutherford Appleton Laboratory	<i>Dr Pawel Majewski</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	15:50 - 16:10
	Maximising sensitivity to low mass dark matter with the Migdal effect and exploring non-standard models including iso...	<i>Ellen Sandford</i>
17:00	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	16:30 - 16:50
	Constraining Dark Matter Spikes with OJ287	<i>Prof. Malcolm Fairbairn</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	16:30 - 16:50
17:00	Signatures of Non-thermal Dark Matter with Kination and Early Matter Domination: Gravitational Waves versus Laborat...	<i>Dr Lucien Heurtier</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	17:10 - 17:30
17:00	Dark Matter reaching out	<i>Nicolas Angelides et al.</i>
	<i>Lecture Theatre 2 (Level 1), Blackett Laboratory, Imperial College London</i>	17:10 - 17:30

Practicalities

- Coffee/lunch on Level 2 foyer (up one level)
- Dinner: next slide; dinner from 7pm, drink in same pub before that if you want
- Toilets: outside lecture theatre, in Level 1 foyer
- Two fire exits: assemble in small car park across the way
- Security: do not leave items unattended (esp. on Level 2 foyer)
- Please ensure that your talk (pdf) is uploaded to Indico before your session
- Need help? Ask me, Nicolas or Albert

Dinner: Prince Alfred Pub 112 Queensway, Bayswater, London W2 3RR (where you can have anything you like as long as it's pie...)

- Leaving here 10 mins after meeting: 25 min walk or bus #70 from Elvaston Pl (Stop RV)



Let's get started, dark matter won't find itself!