



About Institute for Particle Physics Phenomenology

The Institute for Particle Physics Phenomenology (IPPP) is a leading international center for research in particle physics phenomenology - the bridge between theory and experiment in the study of the tiny building blocks of all matter in the universe and of the fundamental forces that operate between them.

Our research addresses what happens when elementary particles are smashed into each other at very high energies and we provide the theory and analysis relevant to experiments at the Large Hadron Collider (LHC) — the world's largest particle accelerator which discovered the Higgs boson. We are also working on the ambitious quest of identifying, predicting and studying physics scenarios beyond the Standard Model. This quest is closely related with the mysteries surrounding antimatter and dark matter, the possibility of supersymmetry, new fundamental forces and even the very modifications of the structure of space-time at very high energies.

The IPPP is a joint venture of Durham University and the UK Science and Technology Facilities Council (STFC). Our activities are overseen by an international Steering Committee which meets every six months to review our research, workshop programme and our progress against our objectives.

The IPPP forms part of the Ogden Centre for Fundamental Physics which was officially opened by the Prime Minister, Tony Blair on 18th October 2002. IPPP is also part of the Centre for Particle Theory in Durham, based jointly in the Departments of Physics and Mathematical Sciences.

For more information, visit our website www.ippp.dur.ac.uk

Welcome to

INTERNATIONAL PARTICLE PHYSICS MASTERCLASS

28 March 2019

Institute for Particle Physics Phenomenology
Durham University



Programme

Time	Event	Venue
09:00 – 09:30	Registration	Ogden Center
09:30 – 09:35	Welcome Lucy Budge	Ogden Center
09:35 – 10:10	What is the world made of? An introduction to Particle Physics Prof. Alexander Lenz	PH8
10:10 – 10:45	How can we see elementary particles? An introduction to the Large Hadron Collider Dr. Gurpreet Singh Chahal	PH8
10:45 – 11:00	Coffee Break	OC218
11:00 – 11:45	The W-boson at the ATLAS experiment How do we discover new particles? Christos Vlahos	PH8
11:45 – 12:45	Lunch	OC218
12:45 – 14:45	Hands-on activity Working with the existing LHC data	CG65/66
14:45 – 15:00	Coffee Break	OC218
15:00 – 16:00	Sharing your findings Videoconference with four other institutions	PH8
16:00 – 16:10	Farewell Dr. Aidin Masouminia	Ogden Center

The organizing committee:

Lucy Budge
Gurpreet Singh Chahal
Alexander Lenz
Aidin Masouminia

Our outreach-webpage:



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Organizers note:

Please do remember to fill in the IPPM questionnaire that will be sent to you (via email) after the Masterclass. This will help us to evaluate our performance and assists us to expand our reach to other areas by providing valuable data.

Outreach Program and IPPM2019 on social media:



@IPPP_Durham
@physicsIMC
#LHCIMC
#lhcimc

Emergency contacts:

Administrative Secretary: **Joanne Bentham**
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