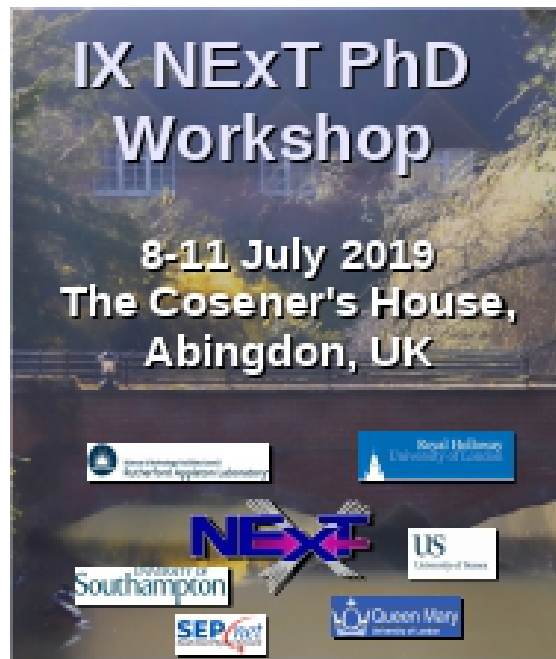


Decoding new physics from data: connecting theory and signatures

Monday 8 July 2019 - Thursday 11 July 2019

Cosener's House



Book of Abstracts

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Lecture 1

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Joe Smith (Cambridge): Quantum mechanics in magnetic backgrounds with manifest symmetry and locality

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Yannick Kluth (Sussex): Asymptotic Safety of $f(\text{Ric})$ Gravity

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Charles Cresswell-Hogg (Sussex): Four-fermion interactions and the origin of mass

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Muyuan Song (Southampton): Light Charged Higgs boson with dominant decay to quarks, and its search at the LHC and future colliders

Corresponding Author: ms32g13@soton.ac.uk

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Jack Holguin (Manchester): Parton Branching at Amplitude Level

Corresponding Author: jack.holguin@manchester.ac.uk

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Daniel Locke (Southampton): Minimal Consistent Fermion Dark Matter

Corresponding Author: d.locke@soton.ac.uk

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Michael Soughton (Sussex): On finding collider-stable particles using Machine Learning

Corresponding Author: michaeloughton@gmail.com

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Welcome

Corresponding Author: belyaev1967@gmail.com

Felipe Rojas (Chair: A.Belyaev) / 10

”Dark matter from a vector field in the fundamental representation of SU(2)L”

Corresponding Author: astrofis.rojas@gmail.com

Higgs and BSM Phenomenology / 11

Higgs and BSM Phenomenology: 2 (Chair: A. Akeroyd)

Corresponding Author: sven.heinemeyer@cern.ch

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Higgs and BSM Phenomenology: 3 (Chair: A. Akeroyd)

Corresponding Author: sven.heinemeyer@cern.ch

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Flavour physics and BSM test at the LHC: 3 (Chair: A. Belyaev)

Corresponding Author: nazila.mahmoudi@cern.ch

Search for BSM at the LHC / 14

Search for BSM at the LHC: 2 (Chair: J. Linacre)

Corresponding Author: albert.de.roeck@cern.ch

Introduction to statistical analysis / 15

Introduction to statistical analysis: 1 (Chair: J. Linacre)

Corresponding Author: g.cowan@rhul.ac.uk

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Introduction to statistical analysis: 2 (Chair: J. Linacre)

Corresponding Author: g.cowan@rhul.ac.uk

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Search for BSM at the LHC: 3 (Chair: A. Akeroyd)

Corresponding Author: albert.de.roeck@cern.ch

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Higgs and BSM Phenomenology: 4 (Chair: E. Accomando)

Corresponding Author: sven.heinemeyer@cern.ch

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Introduction to statistical analysis: 3 (Chair: A. Belyaev)

Corresponding Author: g.cowan@rhul.ac.uk

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Search for BSM at the LHC: 1 (Chair: S. Moretti)

Corresponding Author: albert.de.roeck@cern.ch

SEPnet Employer Panel Session / 21**SEPnet Employer Panel Session**

Corresponding Authors: caterina.minelli@npl.co.uk, v.benson@surrey.ac.uk, sellahewa@deloitte.co.uk, alys.brett@ukaea.uk, careers@awe.co.uk, stewart.martin-haugh@stfc.ac.uk, aquila.mavalankar@adpatiximaging.com

The SEPnet employer panel is aimed at raising awareness of career opportunities outside academia for physics doctorates. Panel representatives, all with physics or PhD backgrounds, will spend a few minutes outlining their role, what their organisation does, what skills/knowledge they are looking for and why they might be interested in physicists. The panel session will be followed by a Q&A session and an opportunity for students to talk to employers in small groups.

Caterina Minelli (UK National Physical Laboratory (NPL))

Alys Brett (UKAEA)

Rosh Sellahewa (Manager at the Deloitte's audit and assurance arm)

Cassie Hill (AWE)

Stewart Martin-Haugh (Staff Scientist in the Particle Physics Department at Rutherford Appleton Laboratory.)

Gil Travish (Chief Science Officer (CSO) and Founder at Adaptix Ltd)

Chair: Veronica Benson (Employer Liaison Director - SEPnet)