

IDAS Launch Event

Report of Contributions

Contribution ID: 1

Type: **not specified**

IDAS overview

Monday, 30 September 2019 14:30 (5 minutes)

Presenter: KRAUSS, Frank (IDAS & physics)

Session Classification: Afternoon 1

Contribution ID: 2

Type: **not specified**

Data Mining and Classical Manuscripts

Monday, 30 September 2019 16:30 (10 minutes)

Presenter: HESLIN, Peter (IDAS and Classics)

Session Classification: Afternoon 2: Language

Contribution ID: 3

Type: **not specified**

Rescribe: OCR for historic texts and manuscripts

Monday, 30 September 2019 16:40 (10 minutes)

Presenter: WHITE, Nick (Rescribe (Durham spin-out))

Session Classification: Afternoon 2: Language

Contribution ID: 4

Type: **not specified**

Interactive text mining and visualization in the humanities

Monday, 30 September 2019 16:50 (10 minutes)

Presenter: STURGEON, Donald (Computer Science)

Session Classification: Afternoon 2: Language

Contribution ID: 5

Type: **not specified**

Digital Theology

Monday, 30 September 2019 17:00 (10 minutes)

Presenter: PHILLIPS, Pete (Theology)

Session Classification: Afternoon 2: Language

Contribution ID: 6

Type: **not specified**

Machine Learning and Patterns in Dialogue

Monday, 30 September 2019 17:10 (10 minutes)

Presenter: BROWN, Chris (Education)

Session Classification: Afternoon 2: Language

Contribution ID: 7

Type: **not specified**

Deep Learning for Museum Collections

Monday, 30 September 2019 17:20 (10 minutes)

Working with image data provided by the Durham University Oriental Museum, we sought to test how well a data set created from a museum's digital archives could be used for broad artefact type classification using a CNN implemented in PyTorch, as well as considering potential ways in which computer vision and object recognition could be used to support efforts in heritage protection.

Presenter: ROBERTS, Matthew (Archaeology)

Session Classification: Afternoon 2: Language

Contribution ID: 8

Type: **not specified**

Statistical Methods in Archaeology

Monday, 30 September 2019 17:30 (10 minutes)

Presenter: MILLARD, Andrew (Archaeology)

Session Classification: Afternoon 2: Language

Contribution ID: 9

Type: **not specified**

Music and Big Data (1)

Monday, 30 September 2019 12:00 (10 minutes)

Presenter: EEROLA, Tuomas (Music)

Session Classification: Morning 2: Culture

Contribution ID: **10**

Type: **not specified**

The Sound of MusAlc

Monday, 30 September 2019 12:10 (10 minutes)

Presenter: COLLINS, Nick (Music)

Session Classification: Morning 2: Culture

Contribution ID: 11

Type: **not specified**

Quantum computing research in Durham QLM

Monday, 30 September 2019 11:20 (10 minutes)

Presenter: CHANCELLOR, Nicholas (Physics - Quantum Light and Matter)

Session Classification: Morning 1: Numbers

Contribution ID: **12**

Type: **not specified**

Condor: a cheap HPC

Monday, 30 September 2019 10:40 (10 minutes)

Presenter: PIETTE, Bernard (Mathematical Sciences / CPT)

Session Classification: Morning 1: Numbers

Contribution ID: 13

Type: **not specified**

Doctoral theses and digital scholarship: working with the EThOS collection of the British Library

Monday, 30 September 2019 12:20 (10 minutes)

Presenter: MONTGOMERY, Catherine (Education)

Session Classification: Morning 2: Culture

Contribution ID: 14

Type: **not specified**

Predigital Data

Monday, 30 September 2019 12:30 (10 minutes)

Presenter: EDDY, Matthew (Philosophy)

Session Classification: Morning 2: Culture

Contribution ID: 15

Type: **not specified**

Online competition: how dominant platforms use data

Monday, 30 September 2019 12:40 (10 minutes)

Presenter: CHIRITA, Anca (Law School)

Session Classification: Morning 2: Culture

Contribution ID: 16

Type: **not specified**

Using evolutionary models to study cultural change and diversity

Monday, 30 September 2019 12:50 (10 minutes)

Presenter: KENDAL, Jeremy (DCERC/Dept. Anthropology)

Session Classification: Morning 2: Culture

Contribution ID: 17

Type: **not specified**

The theory-ladenness of observation in big data science

Monday, 30 September 2019 13:00 (10 minutes)

Presenter: VICKERS, Peter (Philosophy)

Session Classification: Morning 2: Culture

Contribution ID: **18**

Type: **not specified**

Intelligent Tutoring Systems and Learning Analytics

Monday, 30 September 2019 13:10 (10 minutes)

Presenter: SHI, Lei (Computer Science)

Session Classification: Morning 2: Culture

Contribution ID: 19

Type: **not specified**

Virtual Bodies: Ethics of Digital Data in Physical Anthropology

Monday, 30 September 2019 13:20 (10 minutes)

Presenter: BUCK, Trudi (Anthropology)

Session Classification: Morning 2: Culture

Contribution ID: 20

Type: **not specified**

Forests and climate change - what do images tell us?

Monday, 30 September 2019 14:35 (10 minutes)

Presenter: DONOGHUE, Danny (Geography)

Session Classification: Afternoon 1

Contribution ID: 21

Type: **not specified**

Statistical Shape Modelling and Applications

Monday, 30 September 2019 14:45 (10 minutes)

Presenter: JERMYN, Ian (Mathematical Sciences)

Session Classification: Afternoon 1

Contribution ID: 22

Type: **not specified**

Classification of Airborne Laser Scanner Data using Deep Learning

Monday, 30 September 2019 14:55 (10 minutes)

Presenter: WANG, Nan

Session Classification: Afternoon 1

Contribution ID: 23

Type: **not specified**

Quite big, very messy: Data science and the Archaeology of the Ancient near East

Monday, 30 September 2019 15:05 (10 minutes)

Presenter: LAWRENCE, Dan

Session Classification: Afternoon 1

Contribution ID: 24

Type: **not specified**

Climate change and the dry tropical forests of Southern Central Africa

Monday, 30 September 2019 15:15 (10 minutes)

Presenter: DAVID, Ruusa

Session Classification: Afternoon 1

Contribution ID: 25

Type: **not specified**

Spectral analysis of coffee in Thailand

Monday, 30 September 2019 15:25 (10 minutes)

Presenter: BROWN, Anthony

Session Classification: Afternoon 1

Contribution ID: 26

Type: **not specified**

The data movement challenge and a communication-avoiding mindset

Monday, 30 September 2019 10:00 (10 minutes)

Presenter: WEINZIERL, Tobias (Computer Science / IDAS)

Session Classification: Morning 1: Numbers

Contribution ID: 27

Type: **not specified**

Extracting Governing Equations from Data

Monday, 30 September 2019 10:10 (10 minutes)

Over the centuries, scientists have sought to describe natural phenomena with mechanistic models. In the last century, we have also made tremendous progress in building powerful non-mechanistic models, from linear regression to random forests and neural networks. However, although data are nowadays abundant in many areas of science and engineering, models often remain elusive. I will introduce the toolbox of sparse regression and illustrate how it can extract parsimonious models from data. I will give the examples of charging electric vehicles and automating the discovery of governing equations from data.

Presenter: CARVALHO, Rui (Engineering / DEI / IDAS)

Session Classification: Morning 1: Numbers

Contribution ID: 28

Type: **not specified**

New insights into magnetic relaxation from HPC

Monday, 30 September 2019 10:20 (10 minutes)

Presenter: YEATES, Anthony (Mathematical Sciences - Magnetohydrodynamics / IDAS)

Session Classification: Morning 1: Numbers

Contribution ID: 29

Type: **not specified**

Escape From Model Land

Monday, 30 September 2019 10:30 (10 minutes)

Presenter: SMITH, Leonard A. (LSE / Oxford / Visiting Prof at Durham (Astronomy))

Session Classification: Morning 1: Numbers

Contribution ID: 30

Type: **not specified**

Statistics, Data, and Science

Monday, 30 September 2019 11:00 (10 minutes)

Presenter: CUMMING, Jonathan (Mathematical Sciences - Statistics, SMCU / IDAS)

Session Classification: Morning 1: Numbers

Contribution ID: 31

Type: **not specified**

Emulation of computer models when multi-fidelity data are available

Monday, 30 September 2019 11:10 (10 minutes)

Presenter: KARAGIANNIS, Georgios (Mathematical Sciences - Statistics / IDAS)

Session Classification: Morning 1: Numbers

Contribution ID: 32

Type: **not specified**

Multi-parameter estimation with P&G

Monday, 30 September 2019 10:50 (10 minutes)

Presenter: DE-ICAZA-LIZAOLA, Miguel (Physics / CDT)

Session Classification: Morning 1: Numbers

Contribution ID: 33

Type: **not specified**

CNN-supervised classification of airborne riverscape imagery

Monday, 30 September 2019 15:35 (10 minutes)

Presenter: CARBONNEAU, Patrice

Session Classification: Afternoon 1

Contribution ID: 34

Type: **not specified**

AI and Ethical Investing

Monday, 30 September 2019 17:40 (10 minutes)

Presenter: SONG, Robert

Session Classification: Afternoon 2: Language

Contribution ID: 35

Type: **not specified**

Mapping Risks in Generated Text

Monday, 30 September 2019 17:50 (10 minutes)

This talk is based on research conducted in collaboration with the United Nations and demonstrates the ability with which AI can be used to generate text easily, and at a low cost. The implications of this to societal peace and stability will be explored, and recommendations for potential steps towards the mitigation of negative consequences given.

Presenter: BULLOCK, Joe

Session Classification: Afternoon 2: Language