



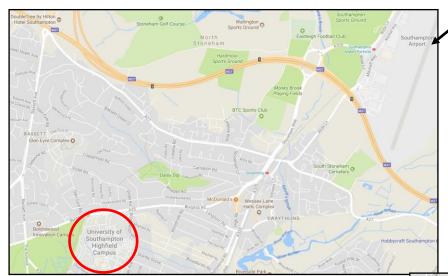
UKCTRF Annual Meeting

Held at Southampton University Highfield Campus on the 7th - 8th September 2017









To get from the airport to the main Highfield Campus you can either take the bus unilink bus: U1 at £2 single/£3.50 all-day pass or you can get a taxi (usually around £6-12).

Or if you are coming by car:

⊓Postcode for satnav: SO17 1BJ

□Visitor parking: There is a Pay and Display car par k for visitors, accessed from University Road. Please note that it can fill up very quickly during the morning.

From the M3: Exit at junction 14 (Southampton A33)

From the M27: Exit at junction 5 (Southampton Airport)

To get to and from the Glen Eyre Halls you can use the U2 (every 30 minutes), the U1 (every 10 minutes), the U6 (every 20 minutes), and the U9 (twice a day). You can get timetables and network route maps on the unilink website.

Or you can either walk or get a taxi.

Taxi companies include:

⊓Radio Taxis - 023 8066 6666

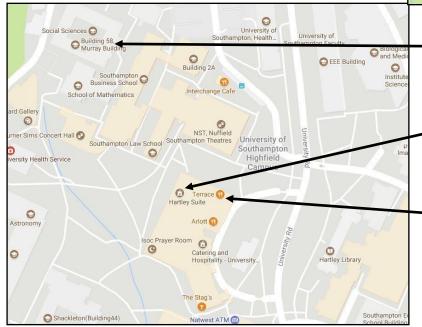
☐ Aero taxis - 023 8001 0203

☐ Southampton Taxi - 023 8022 9292

⊓West Quay Cars—023 8099 9999

If you are driving the postcode for the halls is SO16 3UF.





The Murray Building will be used for the main rooms.

The Hartley Suite will be used for the Drinks reception and the Conference Dinner.

The Terrace Restaurant will be where breakfast is served.





Thursday 7th September 2017

08:00 - 09:00	Breakfast
09:00 - 10:00	Registration and Coffee
09:45 - 10:00	Welcome and Introduction - Professor Nilanjan Chakraborty
10:00 – 10:45	Keynote Speaker: Professor Andreas Kempf, University of Duisburg Essen, Chair of Fluid Dynamics Large-Eddy Simulation of Coal Combustion - Fundamentals and Application. (Chaired by Professor Nilanjan Chakraborty)
10:45 - 11:10	Arash Hamzehloo, Imperial College London Numerical modelling of fuel injection under superheated and supercritical conditions. (Chaired by Professor N Swaminathan)
11:10 - 11:30	Jialin Su, Loughborough University The Acoustic Response of Air-Blast Atomized Sprays. (Chaired by Professor N Swaminathan)
11:30 - 11:50	Dongwon Noh, Imperial College London Large Eddy Simulation of the interaction between self-sustained jet oscillation and flame. (Chaired by Professor N Swaminathan)
11:50 – 12:05	Coffee Break
12:10 – 12:30	Jiawei Lai, Newcastle University Direct Numerical Simulation of head-on quenching of statistically planar turbulent premixed flames: A comparison between simple and detailed chemistry results. (Chaired by Professor Stewart Cant)
12:30 – 12:50	Bruno Soriano & Mark Picciani, University of Southampton An Adaptive-fidelity Approach for Premixed Turbulent Combustion Simulation (Chaired by Professor Stewart Cant)
12:50 – 13:10	Davide Laera, Imperial College London Large Eddy Simulations for the Flame Describing Function of a premixed turbulent swirling flame. (Chaired by Professor Stewart Cant)
13:10 – 13:30	Philip Sitte, University of Cambridge LES-DCMC of a heptane spray flame. (Chaired by Professor Stewart Cant)
13:30 – 14:30	Lunch





14:35 – 15:20	Keynote Speaker: Professor Cesar Dopazo, University of Zaragoza, Spain The importance of strain rates normal to premixed flames: DNS stance. (Chaired by William P Jones)
15:20 – 15:40	Daniel Friedrich, Imperial College London Large eddy simulation of a gas turbine model combustor using the Eulerian subgrid probability density function method. (Chaired by Dr Edward Richardson)
15:40 – 16:00	Lucas Franke, Imperial College London An RCCE-ANN Tabulation Approach Applied to Sydney Flame L. (Chaired by Dr Edward Richardson)
16:00 – 16:15	Archer Update - Dr Neelofer Banglawala
16:15 – 16:35	Coffee break
16:35 – 17:35	Impact Advisory Panel Meeting
16:35– 18:45	Back to accommodation, networking, own time
18:45 – 19:30	Drinks and Nibbles - networking
19:30 – 21:30	Conference Dinner





Friday 8th September 2017

08:00 - 08:30 Breakfast

08:30 - 09:00 Registration and Coffee

09:00 – 09:45 Keynote Speaker: Dr Isaac Boxx "Dr. Isaac Boxx, Institute of Combustion Technology, The German Aerospace Center

What can High-Bandwidth Laser Imaging Tell Us About Swirl Flame Dynamics at Engine-Relevant Conditions?

(Chaired by Professor Epaminondas Mastorakos)

09:45 – 10:05 George Papadakis, Imperial College London

Spatial evolution of velocity and scalar fields behind a square grid element.

(Chaired by Dr Salvador Navarro-Martinez)

10:05 - 10:25 Andrea Giusti, University of Cambridge

LES/CMC simulation of the forced response of a non-premixed methane swirling flame with radial fuel injection.

(Chaired by Dr Salvador Navarro-Martinez)

10:25 - 10:55 Coffee Break

10:55 – 11:15 Madhav Rao Chandra Vendra, University of Warwick

CFD modelling of Vented lean deflagrations. (Chaired by Dr Salvador Navarro-Martinez)

11:15 – 11:35 Ivan Sikic, University of Warwick

WSGG and wide band gas radiation models for pool fires in FireFOAM.

(Chaired by Dr Salvador Navarro-Martinez)

11:35 – 11:55 Girish Nivarti, University of Cambridge

High-intensity turbulent flame-flame interactions.

(Chaired by Dr Salvador Navarro-Martinez)

11:55 - 12:55 Lunch

12:55 – 13:15 Jianping Zhang, Ulster University

Burning behaviours of liquid pool fires in a corridor-like enclosure.

(Chaired by Professor David Emerson)

13:15 – 13:35 Reza Khodadi Azadboni , Kingston University London

CFD Analysis of Deflagration to Detonation Transition in Homogenous and Inhomogeneous

HydrogenAir Mixtures.

(Chaired by Professor David Emerson)





13:35 – 13:55 Kimberley Bowal and Angiras Menon, University of Cambridge

Computational chemical methods for elucidating soot precursor chemistry

(Chaired by Professor David Emerson)

13:55 – 14:15 Zhi Chen, University of Cambridge

LES of a dual swirl gas turbine model combustor with self-excited thermo-acoustic instability.

(Chaired by Professor David Emerson)

14:15 – 14:35 Nguyen Anh Khoa Doan, University of Cambridge

DNS of MILD Combustion.

(Chaired by Professor David Emerson)

14:35 - 14:55 Coffee break

14:55 – 15:15 Ivan Langella, University of Cambridge

LES of Industrial Gas Turbine Combustors.

(Chaired by Dr Stelios Rigopoulos)

15:15 – 15:35 Xujiang Wang, University College London

 $Three-dimensional\ Direct\ Numerical\ Simulation\ of\ Turbulent\ Lean\ Premixed\ H2/air\ Flames\ at\ Elevated$

Pressures.

(Chaired by Dr Stelios Rigopoulos)

15:35 – 15:55 Weilin Zeng, University College London

A Series Combustion Model for LES.

(Chaired by Dr Stelios Rigopoulos)

15:55 – 16:15 Mehdi Jangi, Northumbria University

Modelling of partially premixed combustion.

(Chaired by Dr Stelios Rigopoulos)