

Industrial Applications of Astrophysics/Astronomy

STFC Knowledge Exchange Workshop

NAM2014 Parallel Session

25 June 2014, Portsmouth

The STFC Innovations Club jointly with NAM Organising Committee and Research & Innovation Services of the University of Portsmouth are hosting a knowledge exchange event with industry on current developments and potential industrial applications of astrophysics/astronomy in the key areas of:

- 1. High performance statistical analysis and simulation techniques**
 - To include large scale numerical simulation e.g. for image analysis and data handling techniques, finance and healthcare
- 2. Novel application of optics**
 - To include airborne / space-based remote sensing and adaptive optics
- 3. Space weather modelling**
 - To include space weather modelling and climate change
- 4. High performance computing (HPC) - exaflop computing**
 - To include use of HPC e.g. for image processing, 3D visualisation, security and power systems.

This workshop aims to pull together the interest from both academia and industry in order to facilitate knowledge exchange (KE) between STFC-funded researchers (HEIs and labs) and industry with a view of **exploiting advances in the astrophysics/astronomy area and aid commercialisation of STFC funded research.**

The workshop will further highlight funding opportunities to support KE relationships around astrophysics/astronomy R&D and industrial applications as well as provide an opportunity to hear an update on the state-of-the-art from all speakers on in the astrophysics/astronomy areas.

This workshop is run in parallel with the **National Astronomy Meeting (NAM)** and is free to attend to all participants registered on the STFC website below. In addition there is an opportunity to attend freely **NAM's plenary talks scheduled for the day**, which are also included in our programme.

Provisional Programme

8:30-9.00am	Registration
9.00-10.00am	Plenary Talk: Rob Fender on radio astronomy (Guildhall)
10.00-10:30	Coffee at Guildhall
10.30-10.50	Invited talk - What has astrophysics ever done for us? - Prof R Davies, Oxford
10.50-11.10	DiRAC- e-Infrastructure service for industry and public sector - Dr J Yates, DiRAC
11.10-11.30	HPC-collaboration with industry on future computing platforms - Dr R Hirschi, Keele
11.30-11.50	Extreme data exploration - Dr M Wilkinson, Leicester/DiRAC

- 11.50-12.10 Optical/IR airborne / space-based remote sensing - Dr J Dines, UKATC
12.10-12.30 Space weather- quantitative warnings to help industry - Dr M Hapgood, STFC
12.30-12.35 SEPnet Employer Engagement Programme - Ms V Benson, SEPnet Director

12:30-1:30pm Lunch at Guildhall

- 1.30-1.50pm Astrophysics in finance-systematic investment strategies - Dr T Babbedge, Winton
1.50-2.10pm From solar flares to predicting patient deterioration - Prof L Harra, UCL
2.10-2.30pm SEPnet showcase talk of interest to local industries - Prof S Oliver, Sussex
2.30 -2.50pm STFC External Innovations impact funding schemes - Dr V Skarda, STFC
3:00-4:00pm Plenary talk: Mark Cropper on 'Science and Industry' (MSSL)

4:00-4:30pm Coffee at Guildhall

END

To register go to: [Registration](#)

For more information contact: Dr Vlad Skarda, STFC (vlad.skarda@stfc.ac.uk)

For information on NAM go to: <http://www.nam2014.org>