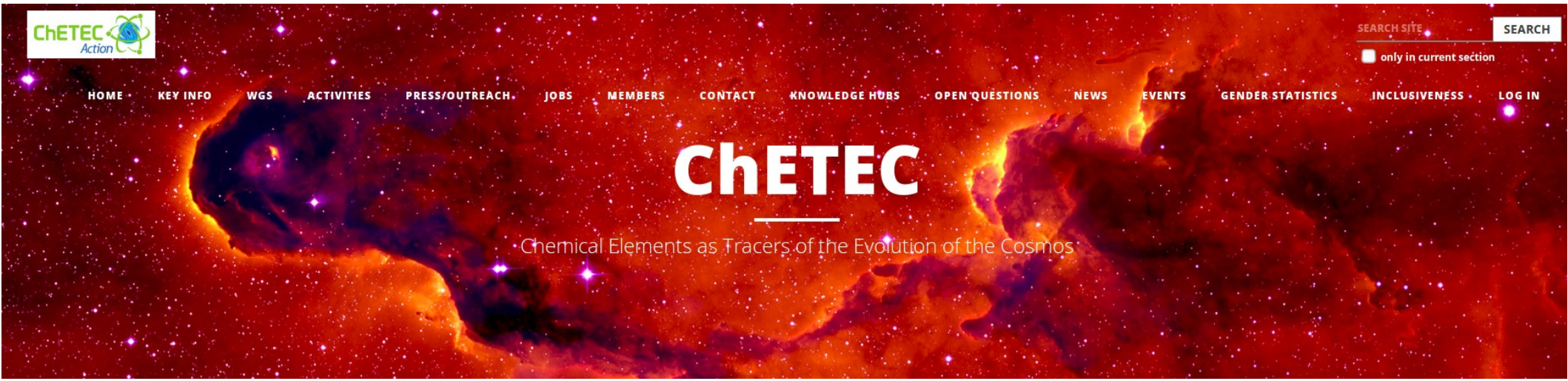
NuGrid/JINA-CEE/ChETEC School: Software Tools for Simulations in Nuclear Astrophysics (17th-19st September 2018, University of Hull, UK)

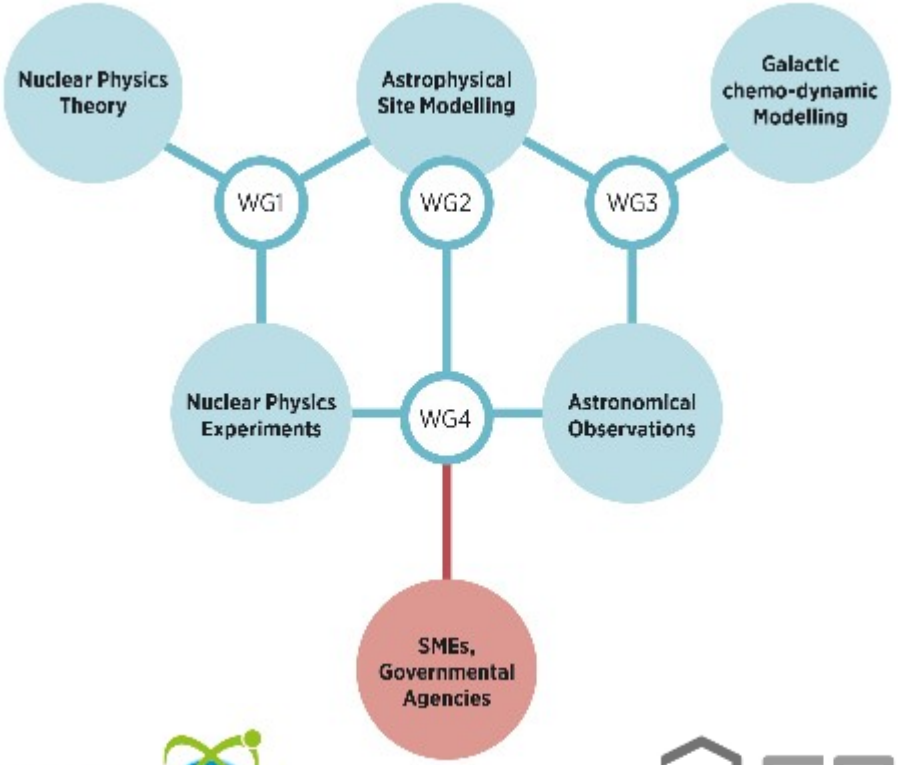
Welcome to Hull!

UNIVERSITY OF HULL


Ayr
A74(M)
United Kingdom
Dumfries
Newcastle upon Tyne
Durham
Middlesbrough
Lake District National Park
North York Moors National Park
Scarborough
Isle of Man
Yorkshire Dales National Park
A1(M)
York
Blackpool
Leeds
Hull
Great Britain
M6
M1
M18
Liverpool
M62
Chester
Peak District National Park
Nottingham
Snowdonia National Park
Norwich
Leicester
Peterborough
M54
ENGLAND
M1
Cambridge
Ipswich
WALES
Colchester
M40
M5
A1(M)
M11
Oxford
Swansea
Swindon
London
Southend-on-Sea
M4
Cardiff
Bristol
Reading
M25
Google
Canterbury
Bath

E.A. Milne
(1896-1950)





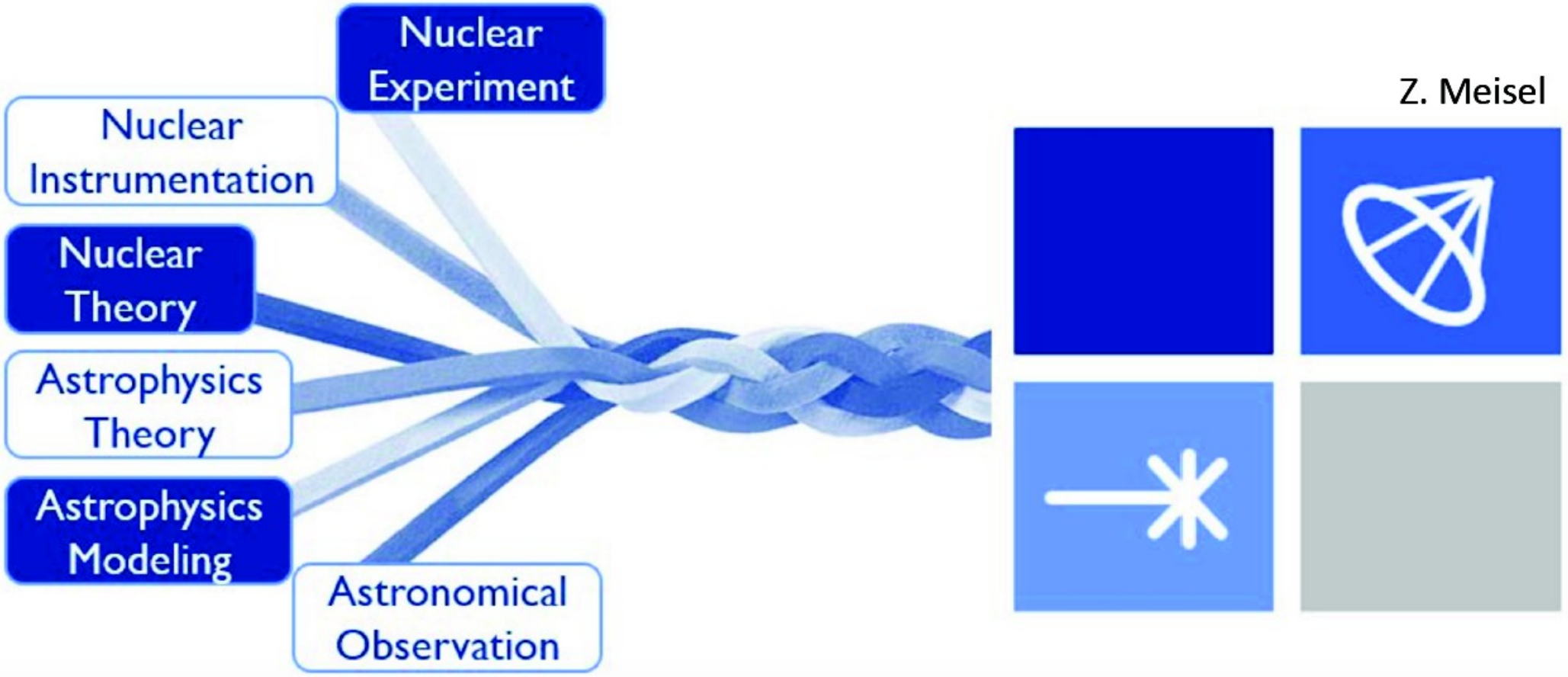
http://www.chetec.eu/

@Raphael Hirschi
Wednesday lecture

ChETEC Action

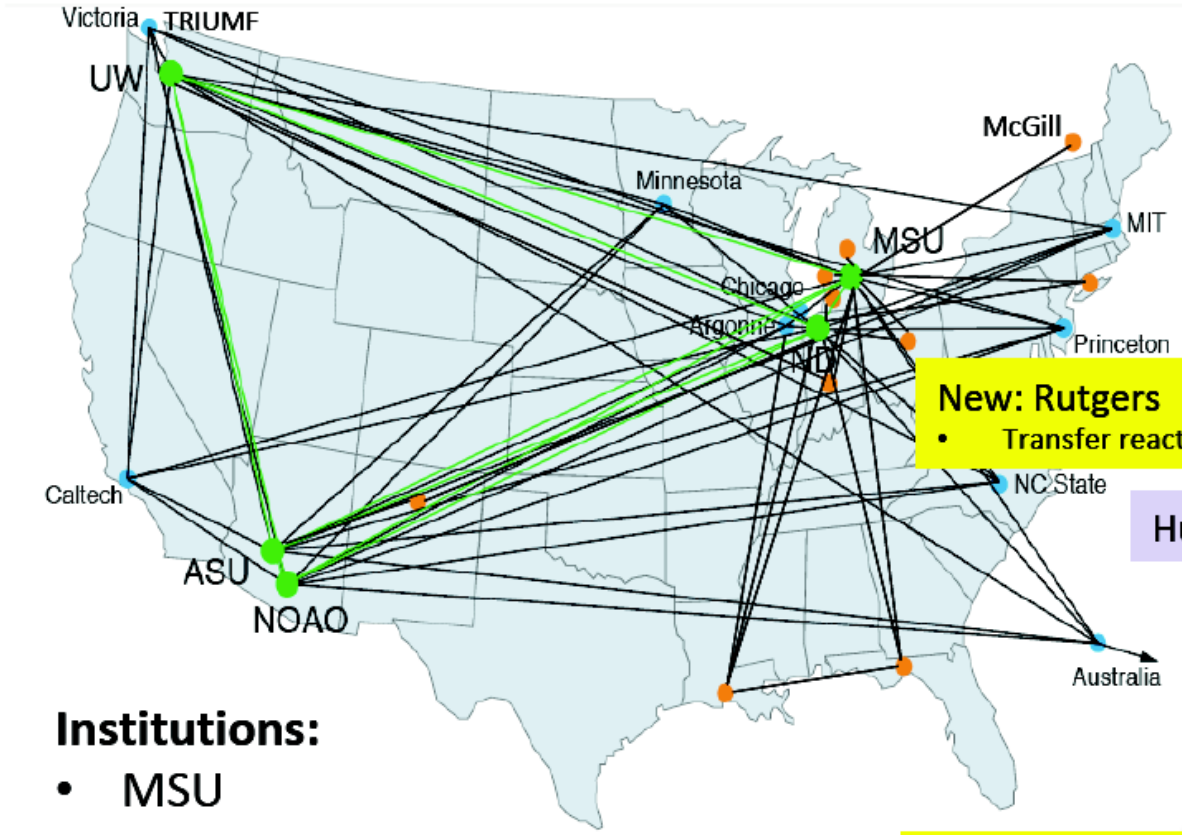
cost
EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY

JINA-CEE brings together diverse expertise



JINA-CEE supported workshops, schools and new initiatives are key to continued success!

The Joint Institute for Nuclear Astrophysics – Center for the Evolution of the Element JINA-CEE



H. Schatz

Institutions:

- MSU
- Notre Dame
- ASU
- University of Washington/INT

+ 24 associated institutions

New: Rutgers
- Transfer reactions

Excellence Cluster Universe
Munich, Germany

Hull

New: Oslo
- β-Oslo Exp.

New: ChETEC EU Cost Action

GSI/TU-Darmstadt

UKAKUREN, Japan

Center for Nuclear Astrophysics
Shanghai University

New: Amsterdam
- X-ray Bursts
- X-ray Observations

Institute for Advanced Studies
Sao Paulo

Monash Center for Astrophysics

How do I engage with JINA-CEE?

- Join a Working Group: Chemical Evolution, NS Crusts, Stellar Burning & First Stars, r-process, XRB, Yields
- Participate in Frontiers - save the date for 2019: May 20-14!
- Organize / participate in JINA-CEE supported events
- Attend the online seminars
- Organize discussions, seminars, etc., at your institutions (I have door stickers if you want one!)

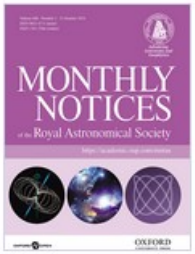
Resources:

www.jinaweb.org (Virtual Journal, Reaclib, jobs, conferences, outreach, etc.), facebook, twitter, YouTube, LinkedIn

Support for organizing/attending conferences, exchanges and visits

Please **acknowledge JINA-CEE** for works benefited from attending this school and any other of our supported events.

Rationale of the School



Volume 480, Issue 1
October 2018

NuGrid stellar data set – II. Stellar yields from H to Bi for stellar models with *M*ZAMS = 1–25 M⊙ and *Z* = 0.0001–0.02

C Ritter, F Herwig ✉, S Jones, M Pignatari, C Fryer, R Hirschi

Monthly Notices of the Royal Astronomical Society, Volume 480, Issue 1, 11 October 2018, Pages 538–571, https://doi.org/10.1093/mnras/sty1729

Published: 29 June 2018 **Article history** ▾

REVIEWS OF MODERN PHYSICS

Recent Accepted Authors Referees Search Press About

The $^{12}\mathbf{C}(\alpha,\gamma)^{16}\mathbf{O}$ reaction and its implications for stellar helium burning

R. J. deBoer, J. Görres, M. Wiescher, R. E. Azuma, A. Best, C. R. Brune, C. E. Fields, S. Jones, M. Pignatari, D. Sayre, K. Smith, F. X. Timmes, and E. Uberseder
Rev. Mod. Phys. **89**, 035007 – Published 7 September 2017

THE ASTROPHYSICAL JOURNAL

i-process Contribution of Rapidly Accreting White Dwarfs to the Solar Composition of First-peak Neutron-capture Elements

Benoit Côté[1,2,3,10], Pavel Denissenkov[1,3,10], Falk Herwig[1,3,10], Ashley J. Ruiter[4,5,6], Christian Ritter[1,3,7,10], Marco Pignatari[3,8,10], and Krzysztof Belczynski[9]

The Astrophysical Journal, Volume 854, Number 2

Important: sign the presence sheet!

-- Monday 17th September --

Building-room: ESK-Comp3 PC

09:00-09:15 - Welcome from Marco and Brad
09:15-10:35 - Lecture 1 - **Falk Herwig** - Stellar simulations and convection in stars

10:35-11:00 - coffee break

11:00-12:20 - Lecture 2 - **Alison Laird** - From nuclear physics experiments to reaction rates for stars.

12:20-13:30 - Lunch break

Building/room: ESK-Comp3 PC

13:30-14:00 - Lecture/training - **a NuGrider** - From stellar simulations to nucleosynthesis. Introduction to afternoon activities.
14:00-15:30 - Afternoon python activities - Stellar data mining

15:30-15:50 coffee break

15:50-17:20 Afternoon python activities - Stellar data mining