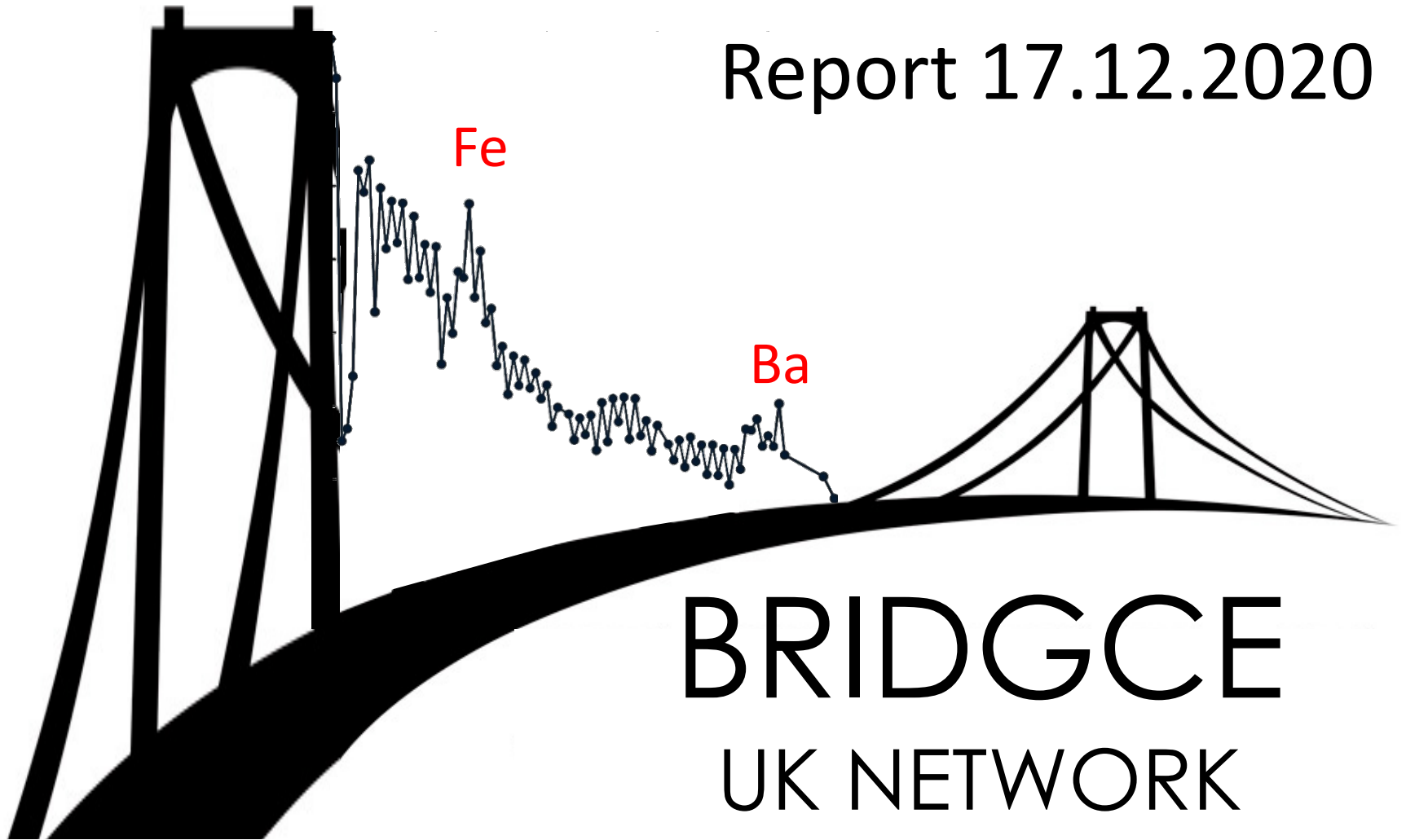


BRIDGCE: BRIdge the Disciplines related to the Galactic Chemical Evolution

Report 17.12.2020



BRIDGCE

UK NETWORK

<http://bridgce.ac.uk>

BRIDGCE Network

- Started in 2013, led by Raphael Hirschi (Keele)
- Research network on nuclear astrophysics, similar to EU ChETEC and US JINA
- **~60 researchers** from **17 UK universities**, sign up at <http://bridgce.ac.uk>
- Chair: Chiaki Kobayashi (Hertfordshire), since 2019
- Aim: knowledge transfer between different disciplines

Multi-discipline



Nuclear Astrophysics

Reaction Rates: GSI-
FAIR, CERN-nToF, Ganil

Stellar Physics

Stellar Mass Loss
Stellar Evolution
Supernovae
Nucleosynthesis
Rotation vs Binary

The Milky Way

Galactic
Archaeology (GA)
surveys: Gaia,
APOGEE, HERMES-
GALAH, 4MOST,
WEAVE, MSE...

External Galaxies

Integral Field Unit
(IFU) surveys:
SAURON, MaNGA,
CALIFA, SAMI, Hector,
KMOS, MUSE,
NIRSpec/JWST!

Steering committee

- Chiaki Kobayashi (Hertfordshire), chair
- Clare Worley (IoA Cambridge) for observations
- Raphael Hirschi (Keele) for stellar evolution
- Marco Pignatari (Hull) for nucleosynthesis
- Alison Laird (York) for nuclear physics

BRIDGCE activities 2019-2021

- NAM parallel session 2019, July, Lancaster, focusing extra-galactic studies, 1.5 hours x 3 over 2 days
- AM 2020, December, virtual, ~60 participants in total, program with a mix of topics, 2 hours x 4 days
- NAM parallel session 2021, 18-23 July, Bath, proposal led by **Umberto Battino** (Edinburgh), focusing observational surveys?
- AM 2021 winter, virtual?
- Support for **students/ECRs**, e.g., opportunities of oral presentation and organizing meetings
- Monitoring **diversity and inclusion**; female fraction of 50% for invited speakers/chairs, but <20% for contributed talks at AM 2020:(
- Any feedback: e-mail c.kobayashi@herts.ac.uk

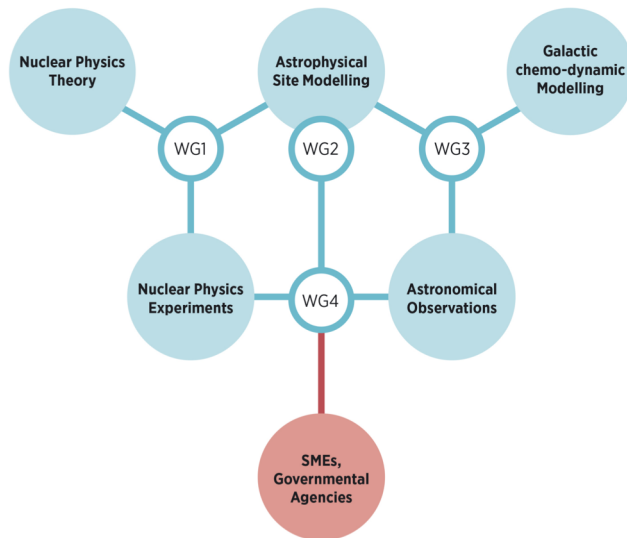
BRIDGCE Consortium

- Continuously funded by STFC in 2014, 2017, 2020
- In the 2020 round, 2 PDRAs funded, out of 5 projects (40% success rate!)
- The **next 2023 round**, if you are interested in contact the PI (Chiaki Kobayashi)
 - Eligibility: academic members of staff (lecturers or equivalent) or hold a Fellowship, such as an STFC or Royal Society Fellowship, won through open competition.
- The 3yr PDRA positions available from 2021 at Armagh and Keele, check BRIDGCE website and mailing list!

International Funding/Networks

Chemical Elements as Tracers of the Evolution of the Cosmos

A network to bring European research, science and business together to further our understanding of the early universe



EU:

- 2017-Sept. 2021: www.chetec.eu
Funding for coll. visits to other ChETEC countries

- 2021-2025: www.chetec-infra.eu
Lots more: positions (Keele/Hull),
Resources (obs./HPC/nucl.), training

World-wide: 2019-~2023: www.irenaweb.org
Funding to visit coll. in US

Public engagement projects:

- [Calendar of women who made Nuclear Astrophysics](#) (ChETEC-led)
- [Nuclear Astrophysics Masterclass](#) (ChETEC-INFRA)

30 countries joined ChETEC to coordinate research efforts in Nuclear Astrophysics:

Austria, Belgium, Bulgaria, Czech Rep., Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Lithuania, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom

BRIDGCE annual meeting 2020 ends

- Co-organizers:
 - Clare Worley (IoA Cambridge)
 - Richard Stancliffe (Hull)
 - Marco Pignatari (Hull)
- Big thank to all speakers and participants
- See you, hopefully in person, next year!