

Report from Cross Community Group

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STFC Nuclear Physics Cross Community

Cross Community Committee Members

- Tom Davinson (chair)
- Ralf Kaiser
- Alison Laird
- Ken Livingston
- Rob Page
- ~~John Simpson~~ / Marc Labiche
- Gavin Smith

Cross Community Posts

STFC Daresbury Laboratory

Michael Cordwell – Design Engineer
Moschos Kogimtzis – Electronics Engineer
James Lawson – Electronics engineer
Ian Lazarus – Electronics Engineer
Paul Morrall – Target maker, technician
Richard Smith – Mechanical/Design Engineer
Carl Unsworth – Software Engineer

Vic Pucknell – visiting scientist

Liverpool

Dan Judson – Software Engineer
Dave Seddon – Design Engineer
Jim Thornhill – Electronics Engineer
Dave Wells – Electronics Engineer

Manchester

Andy Smith – Design Engineer

Electronics & Software Support Activities 2021/2

- R3B silicon tracker
- AGATA ongoing support of AGATA & next phase project definition
- ISOL-SRS Support of e-DAQ systems at CERN, GSI and Liverpool
- AIDA @ RIKEN, AIDA @ DESPEC
- Timepix3 project for pair polarimeter and focal plane microscope
 - Phase 1 completed: Asic pcb, flange pcb, data cables, daq computer, sfp fiber modules, and sfb adaptor card
 - Phase 2 ongoing: Fmc pcbs, trigger cables and mechanical enclosure
- JYFL timestamp acquisition system (MIDAS update) and production of ZyDF clock modules.
- MINIBALL DAQ with FEBEX – New trigger system and MIDAS GUI
 - Soon to be tested in Koln and then CERN
- Applied projects – GRi (Gamma-Ray imager), MBI (Molecular Breast Imaging), CapeSym TIBr
- Interface and readout system for CAEN digitisers. Synchronisation CAEN V1725 card with ISS .
- Advice provided on existing pre-amplifiers design for a new PMT detector (TACTIC)
- Glasgow 64 SiPM board designed

Other generic CC support

- WWW
- Systems support
- MIDAS
- CAEN digitizers
- Merger 2.0
- Grant preparations
- Laboratory operations

Mechanical Design & Technical Support Activities 2021/2

- AGATA support structure for PPRP grant (2pi system @ Legnaro)
 - Assembly tested at DL with honeycomb, then partially dismounting, shipped to Legnaro and reassembled
 - New functionalities added to the Test Station for AGATA/SIGMA crystals
 - On going discussion to couple FATIMA with AGATA at Legnaro
- R3B ongoing silicon tracker development, KVI setup modified for beam test at Julich and Laser test at DL
- ISOL-SRS:
 - WP2 (CARME) Mechanical design, integration, testing, installation and commissioning at ETC
 - WP4 (ISS) New target ladder and cover designed and build. Alpha source holder redesigned for double-sided sources; Aluminium shield designed and build to stop unwanted particle in S1 detector (ELUM)
- DTAS coupled to AIDA: on-going discussion.
- IDS: Concept design approved with some alterations and detailed drawing produced.
- Applied projects – 3D gamma imager (IPS)
- Triple Plungers (Miniball and JYFL)
- SHARC2 @ ELIADE, ALIGANT @ ELI-NP, and MARA Beamline including MARA-LEB conceptual design of vertical beam line
- FiFi with ISS, STEFF, CRIS@ISOLDE
- GAMKA at iThemba (structural analysis)



STFC NP Consolidated Grant 1.10.21-30.9.24

STFC CCC *met* Wednesday 27 January 2021

NPGP CC FTE allocation

10.3 FTE/year (3.8 electronics, 3.5 mechanical, 2.0 software, 1.0 technical)

NPGP theme prioritisation

STFC Projects

implementation plan

FTE themes/projects

profile

Allocation plan and profile completed after consultation with all PI's.

	Mech	Elect	Soft
Top	100%	100%	100%
High	75%	75%	70%
Medium	40%	60%	35%
Low *	n/a	n/a	n/a

	Mech	Elect	Soft	Soft. for Applied
New project *	0%	0%	0%	
CC generic	75%	75%	70%	15%
New Grant	30%	30%	30%	

*: no CC effort requested in any low priority themes and no allocation recommended by NPGP for new projects.

Further information

<http://npg.dl.ac.uk/XCommunity/>

CC Requests

Please contact relevant coordinator to discuss requirements

- Electronics Engineering Coordinator Ian Lazarus
- Software Engineering Coordinator Marc Labiche
- Mechanical Engineering Coordinator Richard Smith