

CCPi Exec Meeting – Thursday 29th Mar 2018

University of Manchester and Rutherford Appleton Laboratory/Harwell Campus: Bluejeans video-conference

Minutes

Attendees [8] (Apologies: Peter Lee, Manuchehr Soleimani, Gordon Brown and Barbara Montanari)

- Jakob Sauer Jørgensen (Manchester, JJ)
- Martin Turner (Manchester, MT)
- Philip Withers (Manchester, PW)
- Bill Lionheart (Manchester, BL)
- Martyn Winn (STFC, MW)
- Daniil Kazantsev (Manchester, DK)
- Srikanth Nagella (STFC, SN)
- Edoardo Pasca (STFC, EP)

Minute	Item	Action
29.03.01	<p>Approvals:</p> <ul style="list-style-type: none"> - £1k for Lee Margetts for an Image-based Modelling workshop – June/July 2018 (moved from February 2018) - £1.5k for ToScA events – same deals as previous years - Travel money for speakers for Advanced in X-ray Imaging Workshop (J. Woods). Limited funds expected (max £400 per person). - dimensional-XCT meeting willing to fund students for travel for networking; usual CCPi rules (on website) - Funds for Fringe meeting lunch and any hotel bills for CCPi members. 	MT
29.03.02	Stand at dXCT (2-3/7/2018), ToScA (10-12/9/2018) and RAL (14-15/6/2018) workshop to be manned.	EP/SN/ MT
29.03.03	<p>Papers:</p> <ul style="list-style-type: none"> - Flagship reconstruction paper accepted - TomoPhantom paper submitted - CPC paper proposal for 2019 ongoing 	DK, ALL
29.03.04	<p>Lunch and Learn meeting – fully listed with talkers until new season starts in October 2018.</p> <p>Training courses on Avizo ongoing</p>	MT
29.03.05	<p>Recent Past CCPi Fellowships:</p> <ul style="list-style-type: none"> - Hamish Carr visit with student (CIL integration) - Joan Duran, Italy (Flagship integration) - Marcus Hanwell (mainly visualisation support) 	
29.03.06	<p>LoS Successes:</p> <ul style="list-style-type: none"> - Llion Evans – five year fellowship at Swansea - Marcus Hanwell – travel to UK and integration in RSE conference <p>Recently Supporting LoS (last three months):</p> <ul style="list-style-type: none"> - BL proposal - Peter Lee network grant - MWG (Warwick) equipment grant 	ALL
29.03.07	<p>Advertise related meetings:</p> <ul style="list-style-type: none"> - EGUK 2018 at Swansea - 9th World Congress on Industrial Process Tomography at University of Bath 	ALL

29.03.08	Joint workshop with PETMR and CCP EM on Fringe event on 14 June 2018	MT	
29.03.09	New Staffing: - new member to be based in Manchester (Lab bias) – contracts going through Martyn, Barbara at UKRI-STFC/SCD etc	MT/MW/ BM	
29.03.10	Update on code releases of CIL for version 1.0 – separated document to be prepared: e.g. http://cil.readthedocs.io/en/latest/	EP	
29.03.11	Case Studies: - Public Engagement – Action MT / ICAL (RG/PM) - IMAT integration – Action GB / MT / SN - Beamhardening correction – RF/GD - Quantification algorithms - Peter Lee / RF-SN - CGLS code and use (inc open source data) - and links to DLS/SAVU - ...	ALL	
29.03.12	Request for new users (testers) for CIL-Framework structure; Manchester, Bath. Including link with new grants, industrial CASE awards etc...	ALL	
29.03.13	Mark Basham requested SurVos support and LoS to be provided	MT/SN	
29.03.14	Brain Bay asks for further time for code hardening. Request BB or researcher to give a remote video presentation	SN	
29.03.15	Two summer students requested to do ML/AI on tomography data - request half funding for one student £1k -£1.5k approved if matched. Link to next Working Group meeting – talk on ML from speakers.	EP	
AOB	- Liverpool issue with DLS data (request from Robert Atwood): automated data cropping - Monitoring data transfer flow from DLS to Soton (Tony Hay) - presentation at SSI EPSRC USA-UK event - visit of IMAT to Manchester and use of beamtime request XCT time in Manchester (approved)	SN MT/EP MT JJ/DK	
	Next meeting is the Working Group planned for 15 May 2018: 11am-2pm Follow-on is a CCPi Flagship project meeting 2pm-4pm Agenda etc at: http://tyne.dl.ac.uk/twiki/bin/view/Visualisation/CCPiTomo		
Minute	Action	Person Responsible	Completion date planned
29.03.01	Inform Approved items and liaise	MT	Sep 2018
29.03.02	Stand allocation three events	EP	Sep 2018
29.03.03	CAS Paper	DK	Mar 2019
29.03.04	Informal speakers at Manchester	MT	Dec 2018
29.03.05-.07, .13	Advertise new fellows/ LoS/ meetings	Newsletter - ALL	Ongoing
29.03.08	Fringe event coordination	MT	Jun 2018
29.03.09	New staff member	EP/MT	Jun 2018
29.03.10, .12	CIL/Flagship launch and new testers	EP	Jun 2018
29.03.11	Case Study coordination	MT/EP	Ongoing
29.03.14	Brian Bay or student to speak	SN	Jul 2018
29.03.15	Summer Students in ML/AI	EP	Oct 2018

Appendix A: SSI/EP SRC UK-USA actions and Working group actions

Working Group (att. 18) 15 November 2017 copy of action table – with updates.

Minute	Action	Person Responsible	Date due to be completed by
15.11.01	Coordinate a CPC paper proposal for 2019	DK	See Above
15.11.02	Coordinate with Nick Brierley/MTC on show and tell for 2018	EP	Done – talk at Manchester
15.11.03	To coordinate the Avizo – Amira software licenses between DLS, RCaH, ISIS and SCD.	EY	
15.11.04	Prepare pull-ups for ToScA/D-XCT roadshow and talks	EP	See Above
15.11.05	Make a small dataset working with DK on phantom dataset for CIL	EP	
15.11.06	Coordinate and organise a CCPi developers' day at University of Huddersfield.	MT	
15.11.07	Coordinate an invitation for Lee Margetts.	MT	Done
15.11.08	To give update on ISO standard for XCT	MT	Done
15.11.09	To write up and make available one page documentation on cone beam reconstruction algorithm	SN	
15.11.10	To make a small downloadable open dataset for CIL reconstruction algorithms. Either using Sophia beads dataset	SN	
15.11.11	To estimate efforts to compare the trees and to illustrate the problem in compare two trees of the same images (with different number of projections, limited angle reconstruction)	EP	
15.11.12	To coordinate a programme (whoever interested to involve) to put together a work plan that leads to a paper on comparing the blind spot in CT reconstruction.	EP	
15.11.13	To get in touch with GD to send the paper and code on mesh to projection software.	EP	
15.11.14	To explore how to apply/try NV's denosing/pre-processing algorithms on IMAT data.	SN	
15.11.15	To get in touch with TB for using MapReduce for tomo reconstruction	EY	

Meetings (weekly) for techy discussion occur including actions for the SSI-EP SRC USA-UK collaboration travel grant; to consider tomviz as a tool. Release dates for the respective software and differences in framework have been discussed. List of items raised:

- Poster and ppt to be produced for SSI/RSE workshop on 24 April 2018 (MT)
- Licenses – BSD licences preference but Apache licenses acceptable
- Docker – Issue with BOOST package, tomviz avoid dependencies: but docker container may be a solution
- Readers / writers – asked for a writer from CIL so can be read into tomviz. Then have a simple way from lab machines to tomviz (using CIL)
- Make available SAVU / DLS datasets for easy use
- Real IMAT data sets are requested – proposal planned beamtime with IMAT/ISIS
- Exchange links for the CCPi nexus reader that is in paraview to be integrated to tomviz

Appendix B: list of Bid Proposals – just a sample to be considered - Option snapshot (28/3/2018):

- STFC PE awards - new impact for Paleo results <https://www.stfc.ac.uk/public-engagement/public-engagement-grants/pe-funding-opportunities/stfc-public-engagement-spark-awards/> 19 April
- Royal Society Industrial Fellowships <https://royalsociety.org/grants-schemes-awards/grants/industry-fellowship/> 17 April
- Wolfson Fellowship - Royal Society <https://royalsociety.org/grants-schemes-awards/grants/royal-society-wolfson-fellowship/> 2 May
- International Collaboration Awards Royal Society <https://royalsociety.org/grants-schemes-awards/grants/international-collaborations/> 3 May
- Ernest Rutherford Fellowship STFC <https://www.stfc.ac.uk/funding/fellowships/ernest-rutherford-fellowship/> 20 September
- Industrial CASE Studentships STFC <https://www.stfc.ac.uk/funding/studentships/industrial-case-studentships/> 4 October
- EU COST grant for EGUK - vol viz? work across Europe http://www.cost.eu/participate/open_call 20 April and every six months

The previous items listed were discussed in a general sense.