CCPi Working Group Meeting - Tuesday May 17th 12:30-15:00

Atlas Visualisation Facility, Rutherford Appleton Laboratory and ICAM, University of Manchester.

Attendees – in person UoM:

- Martin Turner (MT)
- Philip Withers (PW)
- Bill Lionheart (BL)
- Jakob Sauer Jørgensen (JJ)
- Parmesh Gajjar (PG)
- Russell Garwood (PG)
- Hamid Dehghani (HD)

Attendees – in person at RAL:

- Daniil Kazantsev (DK)
- Peter Lee (PL)
- Graham Davis (GD)
- Robert Atwood (RA)
- Winfried Kockelmann (WK)
- Ron Fowler (RF)
- Srikanth Nagella (SN)

Attendees - Remote VC links

- Thomas Blumensath (TB)
- Kris Thielemans(KT)
- Manuchehr Soleimani (MS)

Minute	Item	Action
17.05.00	The meeting began and the attendees introduced themselves.	
17.05.01	7.05.01 Agenda Item 1 - Fellowship updates • Jakob Sauer Jørgensen - 6 months – travel sponsorship to RAL Jan 2016:	
	Jakob gave an overview of his reconstruction work for scans of fibres, and in repairing missing projection data. Currently using FBP, may try TGV in future. PL mentioned a microscopy technique	
	for replicated structures to enhance the resolution that could be related to this problem.	
	 Parmesh Gajjar - Q2 2016 – two months 	
	Parmesh reviewed his work with the custom CT scanner at	
	Manchester University and how to "hack" the interface to re-	
	program the Nikon X-ray machines. He will be giving talks at	
	Southampton and RAL.	
	Russell Garwood – Large memory machine at ICAL	
	Russell reviewed the use of the new CCPi funded computer	

the speakers at the workshop on the 10 th June. A round table session with some of the speakers will also be held on the 9 th June with VC link to University of Manchester.	ers can ask for access to ICAL and Manchester rast range of interesting samples. ravel sponsorship to RAL – outcome was an EPSRC red with a case study for DLS code) MT reported (University of Leeds) – RF reported that Matt is ting Scientist. This will allow him to use Avizo and res for ongoing analysis of his work with beam olcanic samples. at DLS – MT said that CCPi is sponsoring some of
	ne of the speakers will also be held on the 9 th June
17.05.02 Agenda Item 2 – Actions from previous meeting 26.11.02 MT has invited the author of TomViz (based on ParaView with better support for volume visualisation) to visit in September 2016. PL noted that the ISIS software Mantid makes use of ParaView and we should consider links here. SN is already working with the Mantid team on some uses of ParaView. Visiting fellows suggestions (All) Ongoing Seek e-Science journal for reconstruction work. (All) Ongoing New IOP journal with MS has been proposed that may be suitable. Arrange talks on Savu , IMAT and Avizo frameworks (MT) Ongoing Mark Basham to add data sets to Zenodo site Ongoing Encourage people to add data sets to zenodo. (ALL). MT noted that open source data sets up to 50GBytes can be hosted on this site. PL said he had some large data sets referenced in papers that need hosting on line. PL to email details to SN & RF. RA said that the Zenodo site could be ideal for NPL; MT to contact them about using Zenodo. Case studies on beam hardening, quantification RF/SN/MT Ongoing Report on the expanded CCPForge facilities. MT reported that a presentation had been made for CCP PET/MR. However it lacked technical content. Will seek a more technical presentation for CCPi. Ongoing. Contact Russell Garwood about segmentation workshop. (PW) Replaced by MCD workshop. 26.11.13 MT noted that Ceri Brenner from CLF had been elected onto the CCPi working group. 26.11.17 MT had submitted the required progress reports on CCPi to STFC and EPSRC. It was noted that Paul Sherwood, the STFC coordinator of CCPs at STFC, is to retire later this year; and thanked him for the continual support.	s invited the author of TomViz (based on ParaView bort for volume visualisation) to visit in September that the ISIS software Mantid makes use of e should consider links here. SN is already to Mantid team on some uses of ParaView. Suggestions (All) Ongoing Ournal for reconstruction work. (All) Ongoing — with MS has been proposed that may be I Savu , IMAT and Avizo frameworks (MT) Ongoing — with MS has been proposed that may be I Savu , IMAT and Avizo frameworks (MT) Ongoing — with MS has been proposed that may be I Savu , IMAT and Avizo frameworks (MT) Ongoing — with MB — with

17.05.03	Agenda Item 3 Framework updates		
	Software development:		
	SN reported on the work on the Savu framework within		
	DLS which is now in use on I12, I13 and other beam lines.		
	Developments included a new instrument reader.		
	 IMAT – the commissioning of this beam line has begun 		
	and the first images expected by the end of the week (Q3		
	2016).		
	 Avizo – A new version of the NeXus file reader is now 		
	available.		
17.05.04			
	Beam hardening – RF gave an update on the implementation of		
	beam hardening corrections for Xtek and other machines based		
	on the work of GD. A user guide has been written to allow the		
	software to be used with other machines. Work is continuing with		
	Matt Pankhurst on a paper using volcanic samples.		
	 Erwan Plougovan has provided an updated set of his software 		
	tools that can be used within the CCPi set of Avizo plugins.		
	 CCP Forge now supports continuous build server Jenkins and CCPi 		
	plugins will move to this in future. Currently Jenkins builds of the		
	plugins are performed on a local machine.		
17.05.05	Agenda Item 5 – CCPi Website and Admin		
	MT reported on the new Drupal website that is now in place.		
	MT will investigate providing file sharing through dropbox for		
	business.		
17.05.06	Agenda Item 6 – Events and Training		
	Four training courses have been held at the University of		
	Manchester.		
	A Drishti training course will be held at UoM shortly.		
	PL reported that several training courses have been held at RCaH.		
	MT asked PL to provide details of future courses to SN for		
	inclusion on the CCPi website. (Actioned above).		
	 BL suggested a 2 or 3 day course on data intensive reconstruction, 		
	possibly with the CDT (Centre for Doctoral Training) at UCL. PW		
	said that an informal relationship with the CDT might be the best		
	way to start, with CDT's sharing courses. MT to investigate	MT	
	possibilities.	IVI I	
	Show and tell sessions: Tay the tables and isolated will be used at U-M again day.		
	 Touch tables – displays will be used at UoM open day, 		
	19 th June. And		
	Request at the Daresbury Labs open day Recall that a Reval Society public ongagement event will be held.		
	 PL said that a Royal Society public engagement event will be held shortly at RCaH and displays will be left in place after the event. 		
	Details not yet publicly available, but opportunity to provide CCPi		
		MT	
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	flyers. MT said he would investigate a show and tell session at RCaH and		
	 MT said he would investigate a show and tell session at RCaH and 		
17.05.07			

17.05.08	 MT reported that the shared DLS/RCaH/RAL Avizo license agreement was put in place in March 2016 with an increased number of tokens and for three years. Kate Dobson is still looking to get an EduServ licensing agreement for academic use of Avizo. The ICAL node is aiming to use only Open Source software. Agenda Item 8 – Test data sets MT suggested that a test data set from the ISIS IMAT instrument would be a good example to place on the Zenodo CCPi site. SN to investigate. SN had tested DLS to UoM transfer times and found them to be adequate, but less than hoped for, possibly due to fire wall issues. RA said that a new interface to data on DLS has been implemented and this may provide improved performance. MT suggested SN retest transfer times and liaise with UoM 	SN
	security/network contacts (via MT).	SN
17.05.09	 Agenda Item 9 – Phil Trans Journal Issue #2 and new IOP Journal MT discussed a possible second issue of Phil Trans on CCPi work in the area of image reconstruction. GD and BL agreed to be joint editors. Talk to editor of previous edition for advice (MS). Need list of authors willing to contribute to edition. 	GD/BL/ALL
17.05.10	 Agenda Item 10 – EU Updates PW reported that he had presented at the recent quantification workshop. The COST programme has approximately one year left to run and it would be useful to arrange a visit from the Astra toolbox developers. DK will investigate arranging a visit by Astra developers to CCPi sites. 	DK
17.05.11	Agenda Item 11 – Working group membership Two new members for working group have been proposed: Farah Ahmed Tim Burnett No objections were made to the above. Other membership suggestions are welcome.	
17.05.12	 Agenda Item 12 – 4 year plan MT discussed the targets for the next 4 years of the CCPi project (on website). The Frameworks could include iterative reconstruction, rich tomography and fast tomography areas. BL said that he had two on going proposals in the above areas, related to rich tomography and this could be a good theme for CCPi to follow. PL reported that he had recently visited the Chinese Shanghai Synchrotron. Collaboration with them may be possible and there are funds that we could bid for. KT and BL discussed the proposed joint workshop between CCPi and CCP PET/MR on possible topics such as Bayesian methods and uncertainty quantification. 	

	 Agreed to make new proposal at next CCP P meeting. 	ET/MR working	group	MT/BL
17.05.13	 Agenda Item 13 – AOB MT said that a student project at RAL with on touch tables and produce "how to" with these system. The question of CCPi funding costs to atwas raised. PW suggested an off-line disthis area. MT noted that CCPi will have a stand at Bath) and some free places will be availated on the stand. DLS I11 beamline will allow long duration up to several months. May be useful to long duration experiments in the future STFC staffing: MT reported that Erica Yate group leader for the visualisation group has moved on to other work and Evguer now joined the group. The CCP steering panel meeting is due successioned by sent to MT. 	ideos on configuent tend training excussion of police ToScA (Universable in return for a experiments in the experiments in at RAL. Barry Soni Ovtchinnikov	vents cy in ity of or help in CT, op on ew earle v has	MT/PW
Minute	Action	Person		ue to be
47.05.03	V6.00 6.11	Responsible	completed by	
17.05.02	Visiting fellows suggestions	All	Ongoin	
	Seek e-Science journal for reconstruction work. Arrange talks on Savu , IMAT and Avizo frameworks	MT MT	Ongoin Ongoin	
	Mark Basham to add data sets to Zenodo site	MB		
	Encourage people to add data sets to Zenodo.	ALL		
	PL to arrange email to SN/RF on future RCaH	PL		
	training courses to announce on CCPi lists.			
	Case studies on beam hardening, quantification	RF/SN/MT	Ongoin	g
	Report on the expanded CCPForge facilities	MT/RF	Ongoin	
	Contact NPL to see if they can make use of Zenodo site for their data sets.	MT		
17.05.05	Investigate providing file sharing through dropbox for business	MT		
17.05.06	MT to investigate possible collaboration on courses with CDT at UCL.	MT		
	MT to investigate show and tell sessions	MT		
17.05.08	Seek ISIS IMAT data to publish on Zenodo site.	SN		
17.05.09	Retest DLS to UoM file transfer speed with updated DLS API. GD and BL to discuss editing new Phil Trans issue	SN GD/BL		
17.03.03	on reconstruction.			
	Suggest articles for new Phil Trans issue	ALL		
17.05.10	DK to arrange visit by Astra developers to CCPi	DK		

	sites.		
17.05.12	Updated proposal for joint CCPi/CCP PET/MR	MT/BL	
	workshop at next CCP PET/MR working group		
	meeting.		
17.05.13	Discuss of policy on CCPi support for attending	PW/MT	
	training courses.		
	Send suggestions and contributions to CCPi report	ALL	
	to CCP steering group to MT.		