PHISCC in Perth Programme (version 2.6)



Twitter hashtag #PHISCC

Poster presentations (11-13 Feb):

- 1) Xinkai Chen (USTC, China): Assembly of galactic bulges and discs: indications from HI scaling relations
- 2) Helga Denes (ASTRON): Dark gas around the Chamaeleon molecular cloud
- 3) Ed Elson (UWC): Uncertainties in HI stacking experiments
- 4) Bradley Frank (SARAO): Science Processing of MeerKAT Data at IDIA and SARAO
- 5) Yu Gao (PMO): From HI to the dense star-forming molecular gas in galaxies
- 6) Marcin Glowacki (IDIA/UWC): Incorporating observational effects to galaxy simulations for MeerKAT surveys
- 7) Baerbel Koribalski (CSIRO): ASKAP & WALLABY update
- 8) Boyang Liu (ICRAR/UWA): HI absorption study of LMC
- 9) Gerhardt Meurer (ICRAR/UWA): Stability: the heart of disk galaxy scaling relations
- 10) Nickolas Pingel (ANU): Assessing the Imaging of Early GASKAP Data
- 11) Anastasia Ponomoreva (RSAA/ANU): Detailed HI distribution and kinematics of S0 galaxy NGC 5102: fuelling of the nuclear starburst
- **12)** Toky Randriamampandry (KIAA/Peking): The influence of bars on the kinematics of disk galaxies
- **13)** Kristof Rozgonyi (ICRAR/UWA): **Pixelated preconditioning in Radio Interferometric Imaging**
- 14) Chenoa Tremblay (CSIRO): A search for molecular gas

Monday 11 Feb 2019

Start time	Speaker	Title	
08:15	Registration check-in	Collection of conference coffee mug & nametags	
08:45	UWA (Robyn Owens; UWA DVCR)	Welcome to University of Western Australia opening address	
08:55	Organisers	Workshop logistics announcements	
CHAIR:	M. Verheijen	Theme: Updates from SKA facility & HI working group	
09:00	Jeff Wagg	SKA update (20 min presentation+5 min questions)	
09:25	Lourdes Verdes Montenegro/ Sarah Blyth	HI-SKA Science Working Group (20 min presentation+5 min questions)	
		Theme: Blind surveys	
09:50	Ming Zhu	FAST (20 min presentation + 5 min questions)	
10:15	Bo Zhang	Status Report on FAST Extragalactic HI Survey Data Reduction Pipeline (13 min presentation + 2 min questions)	
10:30		MORNING TEA	
11:00	Tobias Westmeier	On the slope of the HI mass function (13 + 2)	
11:15	Robin Cook	The Connection between Structure and Cold Gas Reservoirs in Galaxies (13 + 2)	
11:30	Karen Lee-Waddell	WALLABY (20 min presentation+5 questions)	
11:55	Tristan Reynolds	ASKAP/WALLABY Early Science Observations of the NGC 7162 Galaxy Group (13+2)	
12:10	Bi-Qing For	WALLABY early science: HI imaging of the LGG~351 group and surrounding galaxies (13+2)	
12:25		LUNCH	
CHAIR:	I. Wong		
13:30		POSTER SPARKLERS (Posters 1-10, 2min each)	

13:55	Ahmed Elagali	A wide-field HI study of the NGC 1566 group using the ASKAP telescope(13+2)	
14:10	Betsey Adams	Apertif (13+2)	
14:25	Paolo Serra	Fornax Cluster with MeerKAT (20+5)	
14:50	Filippo Maccagni	MeerKAT observations of Fornax A (13+2)	
15:05	Natasha Maddox	MIGHTEE survey (20+5)	
15:30		AFTERNOON TEA	
16:00	Renee Kraan- Korteweg	Vela Supercluster with MeerKAT (13+2)	
16:15	Jacinta Delhaize	Early results from HI observations with MeerKAT (13+2)	
		Theme: Targeted surveys	
16:30	Daniel Molnar	Star formation properties of HI-detected galaxies in the Coma cluster (13+2)	
16:45	Brenda Namumba	HI observations of Local Group dwarf galaxies: HI distribution, kinematics, and star formation thresholds (13+2)	
17:00	Enrico di Teodoro	Early GASKAP science: the dynamics of the Small Magellanic Cloud (13+2)	
17:15		PHISCC DAY 1 presentation ends	
17:45		ICRAR-sponsored sundowner reception @Uniclub (1hour)	

Tuesday 12 Feb 2019

Start time	Speaker	Title	
CHAIR:	BQ. For	Theme: Targeted surveys	
09:00	Erwin de Blok	Early MHONGOOSE (20+5)	
09:25	George Heald	The WSRT HALOGAS Survey: Main Results and Data Release (13+2)	
09:40	Attila Popping	Imagine seeing all that faint gas (13+2)	
		Theme: Gas in galaxies	

09:55	Aeree Chung	Molecular gas properties of HI-rich galaxies (13+2)	
10:10	Brad Frank	Science Processing of MeerKAT Data at IDIA and SARAO (13+2)	
10:25		CONFERENCE PHOTO (assembly point: North of Reid Library & South of the Tropical Grove) + MORNING TEA	
11:10	Jing Wang	Suppressed or enhanced central star formation rates in late-type barred galaxies (13+2)	
11:25	Katie Jameson	HI Absorption in the SMC with ATCA and ASKAP (13+2)	
11:40	Yun Zheng	The Comparison of Star Formation and HI Velocity Dispersion in Transitional Dwarf Galaxies (13+2)	
11:55	Chandrashekar Murugeshan	Angular momentum studies using HI in the WALLABY era (13+2)	
		Theme: High redshift HI	
12:10	Kelley Hess	CHILES (20+5)	
12:35		LUNCH	
CHAIR:	L. Staveley- Smith		
13:35	Julie Davis	Early Science with CHILES and Future Application to SKA Pathfinders (13+2)	
13:50	Adam Watts	A statistical quantification of HI profile asymmetry as a function of galaxy properties from xGASS (13+2)	
14:05	Jonghwan Rhee	DINGO (20+5)	
14:30	Tariq Blecher	Strongly Lensed HI (13+2)	
14:45	Andrew Baker	An update on the LADUMA deep HI survey (13+2)	
15:00	Nathan Deg	Systematically Asymmetric	
		Theme: High redshift cold HI	
15:15	Rajeshwari Dutta	Absorption studies (20+5)	
15:40		AFTERNOON TEA	
16:10		POSTER SPARKLERS (Posters 11-14, 2min each)	
16:20	Zheng Zheng	HI absorption with FAST (20+5)	

16:45	James Allison	FLASH (20+5)
17:10		PHISCC DAY 2 presentation ends
17:40		Pre-dinner Drinks + Conference Dinner begins at 18:00 @ in the Roe Room at Matilda Bay Restaurant

Wednesday 13 Feb 2019

Start time	Speaker	Title	
CHAIR:	J. Rhee	Theme: Simulations & Tools	
09:30	Claudia Lagos	Predictions from simulations (20 min presentation+5 questions)	
09:55	Garima Chauhan	The HI Velocity Function: a cosmology or baryon physics test? (13 +2)	
10:10	Lilian Garratt-Smithson	Linking Cosmological Simulations to the ASKAP-FLASH Survey (13 +2)	
10:25	Lourdes Verdes-Montenegro	Towards an HI asymmetries reference free from observational biases (13+2)	
10:40		MORNING TEA	
11:10	Nadine Hank	Exploring Asymmetries in Galaxy Mergers using Simulations (13 +2)	
11:25	Se-Heon Oh	Robust profile decomposition for spectral-line galaxy surveys (13+2)	
11:40	Georgios Bekiaris	GBKFIT: A generic high-performance software for galaxy kinematic modelling (13+2)	
11:55	Vanessa Moss	CHAD: A Consolidated HI Absorption Database (13+2)	
		Theme: Synergy Working Group summary	
12:10	Kelley Hess	Radio surveys /multi-resolution working group (13+2)	
12:25		Logistics announcements	
12:30		LUNCH (& retrieval of posters)	

Here ends the PHISCC 2019 plenary session & here begins the parallel focus sessions (FS)

Start time	FS 1: In the Murdoch Theatre	FS 2: In the Fox Theatre
13:30 to 15:20	 SKA HI-SWG (Lourdes Verdes-Montenegro) Title of the session: Preparation for the 2-day key science workshop of Manchester SKA meeting (audience: open to everyone attending PHISCC) Format: Brief talks & group discussion Aim: To trigger a discussion that could serve as a basis to define potential KSPs and/or ways to proceed to prepare the 2-day key science workshop proposed by the organizers of the next SKA science meeting ("New Science enabled by New Technologies in the SKA Era" to be held at SKA HQ in Manchester from April 8th to 12th, 2019). Would include: exploring which of on-going HI projects, and in which measure, align with SKA1 priority science as defined in the HI Science Book and/or Stockholm list of potential HI surveys, discussing potential required revisions Participants can also propose other topics of discussion they might like to see pushed by the HISWG. 	 FLASH team meeting (Elaine Sadler) <u>Update and discussion session (audience: team & non-team members)</u> Chairs: James Allison and Elaine Sadler (FLASH PIs) For each of the topics below there will be a short update (presenter names in brackets) followed by 10-15 minutes of discussion time: Introduction and overview of FLASH, including executive members, policies, projects and logistics (James & Elaine) Timeline for the survey; what do we need to do and when does it need to be done? (Elaine) Commissioning & Early Science results (James) Pilot Survey plans; what are we going to do and what is the science we expect? (Elaine) Technical challenges still to be addressed (Elizabeth & Matt) Simulations and modelling (Lilian) The CHAD database (Vanessa)
15:20	AFTERNOON	TEA
15:50 to 17:30	Reference Fields <i>(Betsey Adams)</i> Venue moved to ICRAR Lev 2 Boardroom	FLASH team meeting (Elaine Sadler) (Audience: team members)

(*Audience: Anyone who is interested*) Format: Board & group discussion

-decision on common reference fields -potential plans for moving forward

15:50-16:00 Introduction to focus session

16:00-16:20 Overview of SPARCS

Expected outcomes:

This session will focus in more detail on

Writing proposals for optical and mm follow-up (ESO, ALMA, HST etc.)Progress with the FLASH survey

description paper and other planned papers

including:

planning our activities for the rest of 2019,

reference fields	- Data pipeline tests
<u>16:20-16:50</u> Discussion on role of reference fields for HI surveys	- Refining the ASKAP pilot survey plan
<u>16:50-17:10</u> Proposals for common HI fields between pathfinders	
<u>17:10-17:30</u> Determination of working group & common fields to be pursued	
https://docs.google.com/document/d/19Kf fXEsgZUzbymSbajetdA37_DO5Iq_93V3 heIfwfmM/edit?usp=sharing	

18:00	PHISCC Committee meeting (ICRAR Boardroom, Lev 2 Ken &
	Julie Michael building @7 Fairway)

Thursday 14 Feb 2019 (located back @ICRAR/UWA on 7 Fairway)

Start time	FS 1: Lev 2 Boardroom	FS 2: Ground Floor Seminar room	FS 3: G17 (ground floor)
09:30 to noon	Source Finding (Tobias Westmeier) 09:30-10:00 Overview of HI source finding and outstanding challenges (P. Serra) <u>10:00-11:00</u> Discussion and user feedback session (chaired by T. Westmeier) <u>11:00-12:00</u> Presentation of parallelisation options + parallelisation discussion (speaker tbd., someone from the DIA group)	 Visualisation (Russ Taylor) Format: Talks & group discussion 09:30-09:34 Introductory remarks (Russ Taylor) 09:35-10:05 Cloud solution for visualisation in the big data era (Angus Comrie) 10:05-10:35 Cyber-physical discovery systems in action (Chris Fluke) 10:35-11:00 Coffee and open discussion 11:00-11:30 Virtual reality: a new perspective (Angus/ Tom) 	MIGHTEE-HI team meeting (<i>Natasha Maddox</i>) MIGHTEE/MIGHTEE-HI survey progress, ancillary data availability (~30 mins) Processing for MIGHTEE-HI & IDIA, data products + availability (~30 mins) Everyone/anyone: short talks (few minutes) on science ideas, expectations, etc Chaired Discussion: Science planning for 2019 & beyond.

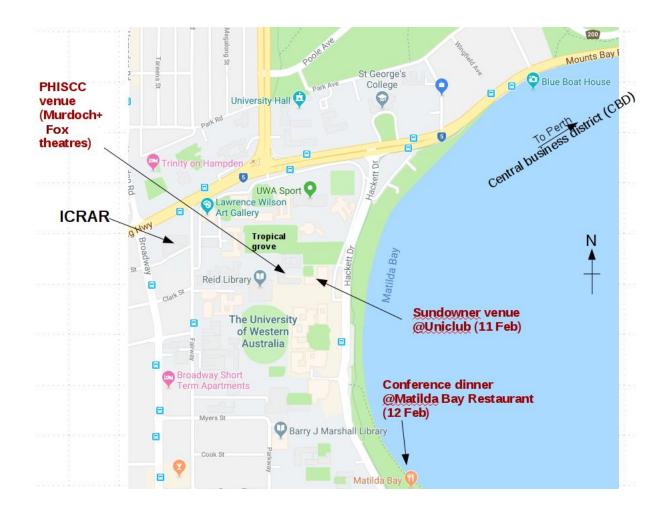
Noon	to 1400	<u>11:30-12:00</u> Future challenges & directions (Thijs van der Hulst) LUNCH (BYO/ self-catered)	
14:00 to 17:00	Source Parameterisation (Se-heon Oh) - Tools for WALLABY kinematics (Se-Heon Oh, 20 + 10 min) - Practical applications to WALLABY early science observations (speakers, 20+10 min) - break (10 min) In-depth discussion for WALLABY kinematic analysis (lead by ??) - Check the workflow of the kinematic analysis for WALLABY - Performance issues of the tools - Distribution issues of the tools - Optimizing the codes? - Combining the (developed) tools as a WALLABY kinematics pipeline - Any other tools?	Visualisation (Russ Taylor) Format: Demos PAF knowledge-swapping session (Betsey, Vanessa & Aidan) Venue: Classroom (next door to seminar room)	 14:00 15:30: MHONGOOSE team meeting (Erwin de Blok) Format: Talk & group discussion Talk topic: Survey overview & needs Discussion topic: structure, priorities & activities 15:30 17:00: MeerKAT-Fornax team meeting (Paolo Serra) Format: group discussion Topics: 1) recent results from MeerKAT commissioning; 2) future commissioning obs

Friday 15 Feb 2019 (located back @ICRAR/UWA on 7 Fairway)

Start time	FS 1: Lev 2 Boardroom	FS 2: Ground Floor Seminar room	FS 3: G17 (ground floor)
09:30 to 10:30	Data Products for public release (<i>Lister</i> <i>Staveley-Smith</i>) - Introduction	Quality Control of data pipeline (<i>Betsey Adams</i>) Spectral line data QA (<u>Audience: Anyone who is</u> interested. Please contact	DINGO team meeting (<i>Martin Meyer</i>) Talks (all ~10min): - Attila & Jonghwan: Intro - Jonghwan/Attila: Current

	 Facility/project updates/plans Use cases Implementation 	<u>Betsey if you would like to</u> <u>present something in the first</u> <u>part of the session</u>) Some sessions potentially joint with "Data products for public release" <u>09:30-09:40</u> Introduction to focus session (by Betsey)	observations and data processing - Kevin: AWS processing - Kristof: uv-gridding methods - Qingxiang: VLA stacking in G09
		<u>09:40-10:30</u> Presentations on QA tools/metrics that exist: - MeerKAT: Filippo Maccagni, DQA products for cross-calibration from MeerKATHI, potentially self-calibration and RFI - Apertif: Betsey Adams, cross-calibration of all beams - ASKAP: ?? Other facilities ?? <u>https://docs.google.com/docu</u> ment/d/1zHY-4VEBdEml3xe	
		oXNsdBxDk4SPTSiU78JpO JLAd_qA/edit?usp=sharing	
10:30 to 11:00		ICRAR FRIDAY MORNING TEA (applies to all)	
11:00 to 12:00	- SKA context - Joint session with QA	11:00-11:30Discussion on QA tools and cooperation -How can tools/metrics be shared between teams -What are we missing? -Is there anyway in which we can work together?11:30-12:00Discussion on QA metrics and association with public data products	Discussion: - Pilot survey and next steps
Noon	to 1400	LUNCH (BYO/ self-catered)	
14:00 to 16:30	15:0017:30: LADUMA team meeting (<i>Sarah</i>	WALLABY team meeting (Lister Staveley-Smith)	RFI flagging and mitigation (Vanessa Moss & Anja

Blyth)		Schroeder)
	Agenda	Agenda:
	o Intro	- brief revisiting of PHISCC
	o Short reports	2018 minutes
	- PS update (Karen)	- address action items from
	- SoFIA pipeline (Tobias)	last meeting
	- Kinematic pipeline	- outline the impact of RFI
	(Se-Heon)	on PHISCC (& current/
	o 2019 observation planning	future mitigation strategies),
	- Pilot survey (Karen,	& plan for a white paper
	Barbara)	- determine what could take
	o Team matters	place in an RFI workshop
	- Membership (Tobias)	(main topic, goals)
	- SWG refresh (Tobias,	
	Lister)	
	o OIR data (Luca, Li)	



Please return of your plastic name-tags when you no longer need them. We thank you for your support & understanding.