

2nd August 2022								
Central US (CT, GMT-5)	Central Europe (CET, GMT+2)	Time (KST, GMT+9)	Program		Speakers		Type of Participation	
			Program	Slot	Name	Title		
18:15 - 19:45	01:15 - 02:45	08:15-09:45	Plenary Lecture	N/A	N/A	N/A	N/A	
19:45 - 20:30	02:45 - 03:30	09:45-10:30	Morning e-Poster					
20:30 - 22:00	03:30 - 05:00	10:30-12:00	Morning Oral Session	IAUS 369-1	Chair - Ben Stappers			
					Evan Keane	Recent results from FRB surveys	In-room Talk	
					Keith Bannister	Fast Radio Bursts with ASKAP - in 3 acts	In-room Talk	
					Kaustubh Rajwade	Pinpointing FRBs in space and time: A study of localised FRBs from MeerTRAP	In-room Talk	
					Franz Kirsten	Pinpointing repeating FRBs with EVN-PRECISE	In-room Talk	
					Joeri Van Leeuwen	The short, high-DM FRB sky in sharp view	Remote Talk	
					Omar Ould-Boukattine	Probing the highest-energy FRB repeater bursts using thousands of hour observing campaigns	In-room Talk	
22:00 - 23:30	05:00 - 06:30	12:00-13:30	Lunch					
23:30 - 01:00	06:30 - 08:00	13:30-15:00	Afternoon Oral Session 1	IAUS 369-2	Chair - Kenzie Nimmo			
					Yin-Zhe Ma	Cosmological uses of Fast Radio Bursts	In-room Talk	
					Esan Mouli Ghosh	Constraining the value of Hubble's Constant using the Redshift-Dispersion Measure distribution of observed Fast Radio Bursts	Remote Talk	
					Khee Gan Lee	The FLIMFLAM Survey for FRB Foreground Mapping	Remote Talk	
					Sunil Simha	Searching for the source of excess extragalactic DM of FRBs	In-room Talk	
					Liam Connor	What can we expect from FRB gravitational lensing?	In-room Talk	
					Mawson Sammons	The Effect of Gravitational Lensing on Fast Transient Event Rates	Remote Talk	
01:00 - 01:15	08:00 - 08:15	15:00-15:15	Break					
01:15 - 02:45	08:15 - 09:45	15:15-16:45	Afternoon Oral Session 2	IAUS 369-3	Chair - Casey Law			
					Lachlan Marnoch	Finding the signature of a dwarf galaxy halo on a fast radio burst	In-room Talk	
					Timea Kovacs	Constraining the dispersion measure and rotation measure contribution of FRB host galaxies using IllustrisTNG50	In-room Talk	
					Kaitlyn Shin	Inferring the FRB Distance and Energy Distributions with CHIME/FRB	In-room Talk	
					Pleunis (in person), Moroainu (remote), Masui (remote)	Breaking news (4 x 5m talks) + Discussion 1a (30 mins) -- Cosmological uses / FRBs as probes of the structure of the Universe	In-room + Virtual	
02:45 - 03:30	09:45 - 10:30	16:45-20:00	Opening ceremony / Welcome Reception					

**3rd August 2022**

Central US (CT, GMT-5)	Central Europe (CET, GMT+2)	Time (KST, GMT+9)	Program		Speakers		Type of Participation	
			Program	Slot	Name	Title		
18:15 - 19:45	01:15 - 02:45	08:15-09:45	Plenary Lecture	N/A	N/A	N/A	N/A	
19:45 - 20:30	02:45 - 03:30	09:45-10:30	Breaking News & Discussion 1b		<a href="#">Chair - Xavier Prochaska</a>		In-room + Virtual	
					Ocker (in person), Chen (remote), Uttarkar (remote), Masui (remote)	Breaking news (3 x 5m talks) + Discussion 1b (30 mins) -- Cosmological uses / FRBs as probes of the structure of the Universe		
20:30 - 22:00	03:30 - 05:00	10:30-12:00	Morning Oral Session	IAUS 369-4	Tarraneh Eftekhari	The Host Galaxies and Environments of Fast Radio Bursts	In-room Talk	
					Adaeze Lorreta Ibik	A search for persistent radio sources associated with repeating fast radio bursts from CHIME/FRB	In-room Talk	
					Calvin Leung	VLBI Localization of a One-Off FRB to an Edge-On Galaxy	Remote Talk	
					Marcin Glowacki	A commensal detection of HI and FRB localisation with ASKAP	In-room Talk	
					Shivani Bhandari	A growing diversity in the types of host galaxies and local environments for fast radio bursts.	Remote Talk	
					Fabian Jankowski	Implications from the first MeerTRAP Fast Radio Burst sample	In-room Talk	
22:00 - 23:30	05:00 - 06:30	12:00-13:30	Lunch					
23:30 - 01:00	06:30 - 08:00	13:30-15:00	Afternoon Oral Session 1	IAUS 369-5	<a href="#">Chair - Kaustubh Rajwade</a>		In-room Talk	
					Pragya Chawla	Observational constraints on FRB progenitors		
					Akshatha Gopinath	Propagation effects in fast radio bursts as seen by the LOFAR telescope		In-room Talk
					Casey Law	Finding FRB Sources without FRBs		In-room Talk
					Danica Scott	The high-time resolution CRAFT FRB sample		Remote Talk
					Jakob Faber	Compelling Morphologies of Fast Radio Bursts with CHIME/FRB Baseband Data		Remote Talk
Ryan Mckinven	Multi-year Polarimetric Monitoring of Repeating CHIME/FRB Sources (on behalf of the CHIME/FRB collaboration)	Remote Talk						
01:00 - 01:15	08:00 - 08:15	15:00-15:15	Break					
01:15 - 02:45	08:15 - 09:45	15:15-16:45	Afternoon Oral Session 2	IAUS 369-6	<a href="#">Chair - Ziggy Pleunis</a>		Remote Talk	
					Dongzi Li	A Highly Variable Magnetized Environment in a Pulsar Binary resembling Fast Radio Bursts		
					Dany Vohl	Searching for FRB persistent radio source counterparts in dwarf galaxies using LOFAR		In-room Talk
					Danté Hewitt	Monitoring repeating fast radio bursts with the Nançay Radio Telescope		In-room Talk
					Inés Pastor-Marazuela	Deciphering the origin of FRBs with Apertif		In-room Talk
					Kenzie Nimmo	A burst storm from FRB 20200120E in an M81 globular cluster		In-room Talk
					Ketan R Sand	High Time resolution burst morphology of FRB 20180916B with CHIME/FRB		In-room Talk
Mark Snelders	Microsecond-duration bursts from FRB 20121102A	In-room Talk						
02:45 - 03:30	09:45 - 10:30	16:45-17:30	Afternoon e-Poster					

**4th August 2022**

Central US (CT, GMT-5)	Central Europe (CET, GMT+2)	Time (KST, GMT+9)	Program		Speakers		Type of Participation	
			Program	Slot	Name	Title		
18:15 - 19:45	01:15 - 02:45	08:15-09:45	Plenary Lecture		Vicky Kaspi	Observational Properties of Fast Radio Bursts	In-room Talk	
					Xavier Prochaska	Multi-wavelength studies and cosmological uses of FRBs	In-room Talk	
19:45 - 20:30	02:45 - 03:30	09:45-10:30	Instrumentation and New Projects talks & Discussion 2a		Chair - Evan Keane		In-room + Virtual	
					Pen (remote), Andersen (in person), Megias i Homar (in person)	Instrumentation and New Projects talks (3 x 5m talks) + Discussion 2a (30 mins) -- Future instruments		
20:30 - 22:00	03:30 - 05:00	10:30-12:00	Morning Oral Session	IAUS 369-7	Sergey Popov	FRB Emission mechanism theories vs. observations and population studies	Remote Talk	
					Di Li	Toward an Evolutionary Picture of FRBs	Remote Talk	
					Marcus Lower	Radio-loud magnetars as Galactic fast radio burst analogues	In-room Talk	
					Navin Sridhar	Radio nebulae from ULX Bubbles as Precursors of Common Envelope Events and Persistent Counterparts to Fast Radio Bursts	In-room Talk	
					Mayuresh Surnis	Slowly rotating neutron stars as potential counterparts to repeating FRBs	Remote Talk	
Zorawar Wadiasingh	Ultra-long Period Magnetars	In-room Talk						
22:00 - 23:30	05:00 - 06:30	12:00-13:30	Lunch					
23:30 - 01:00	06:30 - 08:00	13:30-15:00	Afternoon Oral Session 1	IAUS 369-8	Chair - Akshatha Gopinath		In-room Talk	
					Shriharsh Tendulkar	Multi-messenger and Multi-wavelength observations of FRBs		
					George Younes	Dissecting the radio/X-ray connection in the FRB-emitting magnetar SGR 1935+2154 and implications for the rest of the population		Remote Talk
					Kelly Gourdji	Testing a neutron star merger origin for some FRBs		Remote Talk
					James Chibueze	A MeerKAT, e-MERLIN, H.E.S.S. and Swift search for persistent and transient emission associated with three localised FRBs		In-room Talk
					Suryarao Bethapudi	FRB 20180916B observing campaigns using uGMRT and Effelsberg		In-room Talk
Yuu Niino	High time-resolution optical limits on bursts from repeating FRB 20190520B by simultaneous 24.4 fps observations with Tomo-e Gozen	Remote Talk						
01:00 - 01:15	08:00 - 08:15	15:00-15:15	Break					
01:15 - 02:45	08:15 - 09:45	15:15-16:45	Afternoon Oral Session 2	IAUS 369-9	Chair - Vicky Kaspi		In-room + Virtual	
					Alice Curtin	Searching for FRB-like Counterparts from GRBs using the First CHIME/FRB Catalog		
					Mike Walmsley	Candidate Faint Fast Radio Bursts Found by Citizen Scientists		
					Reshma-Anna Thomas	A Highly Variable Magnetized Environment in a Fast Radio Burst Source		
					Stella Ocker	Scattering Horizons for Fast Radio Bursts		
Parra (remote)	Instrumentation and New Projects talks (3 x 5m talks) + Discussion 2b (30 mins) -- Future instruments							
02:45 - 03:30	09:45 - 10:30	16:45-17:30	Afternoon e-Poster					

# Post Meeting Report for IAUS-369

## Summary of the scientific highlights of the meeting

The scientific presentations at the symposium were an excellent summary of the achievements of the past 15 years of fast radio burst (FRB) research combined with an exciting glimpse forward to what lies ahead for the next couple of decades. The theme of the meeting was the quest to answer the fundamental questions of FRBs' enigmatic nature, progenitors, environments, spatial distribution, and their potential for use as cosmological probes. The meeting was organised around the broad topics of: Recent results from FRB surveys, Emission mechanism theories, Observational constraints on emission mechanisms, Progenitor Models, Observational constraints on progenitors, Propagation effects on the observed FRB bursts, Host galaxies and FRB environments, Cosmological uses of FRBs, Is there an FRB zoo? and Multi-messenger and Multi-wavelength observations of FRBs.

Given the fast-moving nature of the field, recent results are common highlights of every FRB meeting. In the recent results from FRB surveys session, we heard about ideas and results that were hot-off-the-press from some of the leading radio telescopes in the field. The audience was treated to exciting news and results from the MeerKAT, ASKAP, CHIME, WSRT and EVN telescopes. We heard about the growing population of FRBs discovered with the CHIME telescope and the increased host galaxy associations from the ASKAP telescope. The MeerKAT results were centred around their first localisations while the WSRT and EVN results revolved around new discoveries and precise localisations. Our understanding of the emission process and regions is being further enhanced by better polarisation and beam models as well as measurements of beam shapes for the new telescopes.

The session on the cosmological applications of FRBs focussed on the great advances made in utilising FRBs as cosmological probes. The talks ranged from an independent measure of the Hubble constant using FRBs to foreground mapping of the intergalactic medium to expectation of gravitational lensing from FRBs to searching for the source of excess extragalactic dispersion measures of FRBs. This session reinforced the fact that we truly are entering the dawn of cosmological studies with FRBs, which have immense potential to be complementary to supernovae and galaxies. We heard presentations on searches for HI emission and compact persistent radio emission in host galaxies, as well as the growing diversity in the types of host galaxies and local environments for FRBs.

The session on the observational constraints on FRB progenitors provided insight into emission mechanisms, polarization properties, pulse morphologies and frequency dependence. The multi-wavelength and multi-messenger talks touched on the possibility of high-energy counterparts and possible implications for the non-detections of the same. Neutron star merger origins, the radio/X-ray connection in the FRB-emitting Galactic magnetar SGR 1935+2154, searches for persistent and transient emission associated with localised FRBs and high time-resolution optical limits on bursts from a prolific repeating FRB revealed important new properties about their origins. We also further explored the FRB zoo and candidate faint FRBs found by citizen scientists.

The breakout news and discussion sessions provided a safe space for reporting unpublished results and ideas still in preparation. This conference perfectly highlighted the rich variety of physics and astronomy that can be understood, tested, and challenged by using FRBs and showed that there is a bright and exciting future ahead for this field.

## **Executive Summary**

The last few years have revolutionized FRB astronomy, and as a community we are on the brink of answering some of the open questions regarding the nature and uses of FRBs. Hosting the 2022 FRB meeting at the IAU General Assembly would greatly aid in the confluence of astronomers with expertise in areas like cosmology, Galactic dynamics, interstellar and intergalactic medium, high-energy phenomena, and stellar physics, which would be very useful for strategizing and planning the next decade of FRB astronomy. In August 2022 the International Astronomical Union Symposium 369 provided the ideal opportunity to do just that. More than 200 participants from 9 countries attended the 3-day symposium in-person (with many more online) as part of the General Assembly in Busan, South Korea.

There were a total of 62 invited and contributed talks, 11 e-posters and 22 e-talks. The talks were well balanced between historical presentations which placed the context for the field, state-of-the-art presentations which summarised where we are now and those which presented new results and looked to the future. There were a lot of young speakers and few for whom this was their first presentation at an international meeting. This combination led to a very vibrant and dynamic set of talks. We employed a hybrid mode for the discussion session outside the standard talk session so that the opportunities for interaction and discussion were maximised.

Overall the meeting was held at a fitting congregation of astronomers to brainstorm the next decade of FRB astronomy.