			Week 1			
	Start time	Topic	Title	Lecturer	Chair	
September 3	Sunday					
1:00	18:00	Ice Breaking Event	Ice Breaking Event			
	19:00		End of the day			
September 4	Monday	Introduction and "inspiring day"	Title	Lecturer	Chair	
Duration hh:mm						
1:30		Welcome Ceremony	Opening and Welcome Ceremony			
0:20		Overview on the program, structure, goals	About this workshop	Fatemeh Tabatabaei		
0:30		Words from IAU offices for education	Astronomy education in the region	TBD		
0:30		Break	Break			
0:30	14:30	Public lecture on radio astronomy	Public Lecture on Radio Astronomy	Nadeem Oozeer		
0:10	10:50	Questions	Questions			
0:30		Intro 1	Importance of radio astronomy	Jack Galimore		
0:10		Questions	Questions			
2:00		Lunch break	Lunch break			
0:30		Intro 2	Introduction to interferometry	TBD		
0:10		Questions	Questions			
0:30		Break	Break			
0:10		Questions	Questions			
1:30		Software 1	Help with software installation	ALL		
	18:00	End of the day	End of the day			
	Local time					
September 5	Tuesday	Software, interferometers and data archives	Title	Lecturer	Chair	
0:40		Intro to interferometers of the workshop	Introduction to interferometers (ALMA, MeerKAT, LOFAR, VLA, VLBA)	ALL		
0:10		Questions				
0:20		Intro software 1	Intro to AIPS and data structure	Jack Galimore		
0:10		Questions	Questions			
0:20		Intro software 2	Intro to CASA and data structure	Aida Ahmadi		
0:10		Questions	Questions			
0:30) Break	Break			
0:30		Projects	Projects overview, assignments	TBD		
0:10		Questions	Questions			
0:30		Data archives 1 (links and small demo)	HI - data archives	Betsey Adams, Ianja Roger		
0:10		Questions	Questions			
2:00		Lunch break	Lunch break			
0:30		Data archives 2 (links and small demo)	MeerKat archive	Nadeem Oozeer, Giulia Macario		
0:30		Data archives 3 (links and small demo)	VLBI archives	Cristiana Spingolo, Jack Galimore, Michael Janssen		
0:30		Break	Break			
0:30		Data archives 4 (links and demo)	ALMA data archive	Aida Ahmadi, George Bendo		
0:10		Questions on data archives	Questions			
1:10		Software 2	Help with software and download of datasets	ALL		
	18:00	End of the day	End of the day			
	Local time					
Control - ^	Wednesday	Calibration + LOFAR and MeerKat	Title	Lecturer	Chair	
September 6	vvcuncoddy					

0.06 0.40 Calatoria							
0-40 9-45 Chatterior 2	0:40			Basics of calibration	George Bendo		
0.05 0.02 April							
1930 1930 Breise					Cristiana Spingolo		
1100 Cedeburs							
0.06 11.30 Guestions	0:30	10	:30 Break	Break			
0.30	0:30	11	:00 Lecture 1	Intro to MeerKat	Nadeem Oozeer		
DOS 12:00 Linestones	0:05	11	:30 Questions	Questions			
220 12-10 Larch Break	0:30	11	:35 Lecture 2	Intro to low frequency arrays (LOFAR,GMRT,MWA,ASKAP) and public surveys + SKA-Low	Giulia Macario		
0.00	0:05	12	:05 Questions	Questions			
0.05	2:00	12	:10 Lunch break	Lunch Break			
2.00 14.55 Tutorial 1 Meerikal futurial Nateren Curreer 0.30 19.36 Break 0.55 17.05 Tutorial 1 Meerikal futurial Glatia Maccarto 18.00 For of the day	0:20	14	:10 Scientific talk	Science with radio continuum (MHz to GHz)	Giulia Macario, Nadeem Oozeer		
2.00 14.55 Tutorial 1 Meerikal futurial Nateren Curreer 0.30 19.36 Break 0.55 17.05 Tutorial 1 Meerikal futurial Glatia Maccarto 18.00 For of the day	0:05	14	:30 Questions	Questions			
0.30		14	:35 Tutorial 1		Nadeem Oozeer		
1.00 1.00							
End of the day					Giulia Maccario		
Cocal time	0.00				Static Maccanio		
September 7 Thursday		10	End of the day	Elia di die day			
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Notes on flagging 0.05 9:30 Questions 0.05 9:30 Questions 0.06 9:30 Questions 0.07 9:30 Questions 0.08 9:55 Questions 0.08 9:55 Questions 0.09 10:00 Tutoria 2 Confinuum subtraction (lutorial) 0.09 11:00 Questions Questions 0.00 11:00 Questions Questions 0.00 11:00 Questions Questions 0.00 11:00 Questions Questions 0.00 1:00 Scientific talk Questions Ques			HI last was and tutorial	Tillo	Lasturar	Chair	
0.05 9.30 Questions Ourstons O	September 7	ınursday	ni lectures and tutorial	Title	Lecturer	Cnair	
0.05 9.30 Cuestions							
0.20 9.35 Lecture 4 Continuum subtraction (lecture) Betsey Adams, Mustafa Yildiz, Ianja Roger					Betsey Adams		
1.00							
1:00					Betsey Adams, Mustafa Yildiz, Ianja Roger		
0.05				Questions			
0:30	1:00	10	:00 Tutorial 2	Continuum subtraction (tutorial)	Betsey Adams, Mustafa Yildiz, Ianja Roger		
0.20	0:05	11	:00 Questions	Questions			
0.05 11:55 Questions Questions Questions Questions Questions 12:00 Tutorial 3 Masking and cleaning (tutorial) Betsey Adams, Mustafa Yildiz, Ianja Roger 2:00 13:00 Lunch Derak Mustafa Yildiz Mustafa Yildiz Mustafa Yildiz Mustafa Yildiz 0:00 15:00 Questions Questions Questions Betsey Adams, Mustafa Yildiz 0:00 15:20 Questions Questions Betsey Adams, Mustafa Yildiz, Ianja Roger 0:00 15:25 Lecture 6 Moment maps (lecture) Betsey Adams, Mustafa Yildiz, Ianja Roger 0:00 15:45 Questions Questions Questions 0:00 15:50 Break Break Break Break Break Break Break Priday End of the day Betsey Adams, Mustafa Yildiz, Ianja Roger 0:00 16:50 Lecture Mustafa Yildiz, Ianja Roger 0:00 16:50 Lecture 16:00 Tutorial 4 Moment maps (tutorial) Betsey Adams, Mustafa Yildiz, Ianja Roger 0:00 16:50 Lecture 16:00 Tutorial 4 Moment maps (tutorial) Betsey Adams, Mustafa Yildiz, Ianja Roger 0:00 16:50 Lecture 16:00 Tutorial 4 Moment maps (tutorial) Cutorial 4 Lecturer Chair 0:00 9:00 Lecture 16:00 VLBI and general differences with the connected interferometers Cristiana Spingolo, Jack Galimore, Michael Janssen 0:00 9:00 Questions Questions Questions Cristiana Spingolo, Jack Galimore, Michael Janssen 0:00 10:05 Questions Questions Questions Cristiana Spingolo, Jack Galimore, Michael Janssen 0:00 10:00 Questions Questions Questions Cristiana Spingolo, Jack Galimore, Michael Janssen 0:00 10:00 Questions Questions Questions Cristiana Spingolo, Jack Galimore, Michael Janssen 0:00 10:00 Questions Questions Preak Break	0:30	11	:05 Break	Break			
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2:00	0:05	11	:55 Questions	Questions			
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1:40 16:20 Tutorial 4 Moment maps (tutorial) Betsey Adams, Mustafa Yildiz, Ianja Roger End of the day End of the day End of the day Local time September 8 Friday Very Long Baseline Interferometry Title Lecturer Chair 0:30 9:00 Lecture 16 VLBI and general differences with the connected interferometers Cristiana Spingolo, Jack Galimore, Michael Janssen Questions 0:30 9:35 Lecture 17 VLBI calibration differences with other interferometers Cristiana Spingolo, Jack Galimore, Michael Janssen Questions 0:05 10:05 Questions Questions Cuestions Cuestions 0:30 10:10 Tutorial 6 VLBI tutorial Cristiana Spingolo, Jack Galimore, Michael Janssen Cristiana Spingolo, Jac		15	:50 Break				
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9:30 Questions Questions Questions 0:30 9:35 Lecture 17 VLBI calibration differences with other interferometers Cristiana Spingolo, Jack Galimore, Michael Janssen 0:05 10:05 Questions Questions 0:30 10:10 Tutorial 6 VLBI tutorial Cristiana Spingolo, Jack Galimore, Michael Janssen 0:30 10:40 Break Break	0.30	^	:00 Lecture 16	VI RI and general differences with the connected interferemeters	Cristiana Spingolo, Jack Colimoro, Michael Janesen		
9:35 Lecture 17 VLBI calibration differences with other interferometers Cristiana Spingolo, Jack Galimore, Michael Janssen 0:05 10:05 Questions Questions 0:30 10:10 Tutorial 6 VLBI tutorial Cristiana Spingolo, Jack Galimore, Michael Janssen 0:30 10:40 Break Break					Chauana Opingolo, Jack Gailinore, Michael Janssen		
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					Cristiana Spingolo, Jack Galimore, Michael Janssen		
1:20 11:10 Tutorial 6 VI BI tutorial Cristiana Spinoolo Tack Galimore Michael Tanscen							
	1:20			VLBI tutorial	Cristiana Spingolo, Jack Galimore, Michael Janssen		
2:00 12:30 Lunch break Lunch break							
0:20 14:30 Scientific talk Science with VLBI: Event Horizon Telescope Michael Janssen					Michael Janssen		
1:30 14:50 Tutorial 6 VLBI tutorial		1/	:50 Tutorial 6	VLBI tutorial			

0:30	16	6:20 Break	Break			
		6:50 End of the day	End of the day			
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			Week 2			
	Start time	Topic	Title	Lecturer	Chair	
		·				
September 11	Monday	ALMA lectures and tutorials				
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1:30	9	9:00 Lecture 18	Hands-on calibration of ALMA data	Rosita Paladino		
0:30		0:30 Break				
1:30	1	1:00 Lecture 18 (continued)	Hands-on calibration of ALMA data	Rosita Paladino		
2:00		2:30 Lunch break				
0:20		4:30 Scientific talk	TBD	Aida Ahmadi		
0:40	14	4:50 Lecture 19	ALMA Weblog Review	Geroge Bendo		
0:20	15	5:30 Scientific talk	TBD	Geroge Bendo		
0:30		5:50 Break				
1:30	16	6:20 Lecture 20	CARTA tutorial	Aida, George, Rosita		
	17	7:50 End				
September 12	Tuesday	EHT/Advanced analysis/Projects	Title	Lecturer	Chair	
0:45	9	9:00 Lecture 21	EHT data reduction	Michael Janssen		
0:10	9	9:45 Questions	Questions			
0:45	9	9:55 Tutorial	EHT tutorial	Michael Janssen		
0:10	10	0:40 Questions	Questions			
0:45	10	0:50 Break	Break			
0:45	1	1:35 Tutorial	EHT tutorial	Michael Janssen		
0:10	12	2:20 Questions	Questions			
2:00	12	2:30 Lunch break	Lunch break			
0:45	14	4:30 Advanced analysis tools	Advanced analysis tools			
1:30	14	4:30 Project splinters	Project splinters			
0:30	16	6:00 Break	Break			
1:30	16	6:30 Project splinters	Project splinters			
	18	8:00 End	End			
September 13	Wednesda	y Science Talks/Projects/Creativity	Title	Lecturer	Chair	
0:45		9:00 Scientific talk	EMU ASKAP Surveys	Baerbel Koribalski		
0:10		9:45 Questions	Questions			
0:45		9:55 Scientific talk	Scientific talk on AGN	Violette Impellizzeri		
0:10		0:40 Questions	Questions			
0:30		0:50 Break	Break			
0:40		1:20 Science talks by lecturers or advanced students	Science talks by lecturers or advanced students	TBD		
0:10		2:00 Questions	Questions			
2:00		2:10 Lunch	Lunch Break			
1:30	14	4:10 Project splinters	Project splinters			

0:30	15:40 Break	Break			
1:50	16:10 Project splinters	Project splinters			
	18:00 End				
September 14 Thurs	sday Science Talks on Radio Astronomy in middle East + Projects	Title	Lecturer	Chair	
0:45	9:00 Radio astronomy in Iran	From ISM to stars, black holes, and galaxy evolution	Fatemeh Tabatabaei		
0:05	9:45 Questions	Questions			
0:45	9:50 Radio astronomy in Turkey	Radio astronomy in Turkey	Mustafa Yildiz		
0:05	10:35 Questions	Questions			
0:30	10:40 Break	Break			
0:45	11:10 Radio astronomy in Arab World	Radio astronomy in Arab World	Awni Moh'd khasawneh		
0:05	11:55 Questions	Questions			
2:00	12:00 Lunch	Lunch Break			
1:30	14:00 Project Splinters	Project Splinters			
0:30	15:30 Break	Break			
2:00	16:00 Project Splinters	Project Splinters			
	18:00 End				
September 15 Frida	Student reports and closing	Title		Chair	
0:45	9:00 Students presentations I	Short reports by students			
0:05	9:45 Questions	Questions			
0:45	9:50 Students presentations II	Short reports by students			
0:05	10:35 Questions	Questions			
0:30	10:40 Break	Break			
0:45	11:10 Students presentations III	Short reports by students			
0:05	11:55 Questions	Questions			
2:00	12:00 Lunch	Lunch Break			
1:30	14:00 Students presentations IV	Short reports by students			
0:30	15:30 Break	Break			
2:00	16:00 Closing Ceremony	Closing Ceremony	SOC/LOC chairs		
	18:00 End				