## YERAC XI 1978

## Scientific Programme

1545 TEA BREAK

	MONDAY 17 JULY Planetarium, Jodrell Bank			
0930	Welcoming address by Sir Bernard Lovell			
0945	Session 1 PULSARS		Chairman: Dr Andrew Lyne)	
	Mike Salter	Jodrell Bank	Pulsar proper motions	
	Leszek Nowakowski	Torun	On possible interpretations of pulsar velocities	
	John H. Seiradakis	Hamburg	Measurement and implications of the intrinsic position angles of the polarization of pulsars	
	E. V. Suvorov	Gorki	On the motion and radiation of charged particles in a pulsar magnetosphere	
	Yu. A. Kovalev	Moscow	A mechanism for pulsar radiation	
1100	COFFEE BREAK			
1130	Session 2 EXTRAGALACTIC RADIO SOURCES (Chairman: Dr Ian Browne)			
	U. Klein	MPI Bonn	Continuum observations of extended radio sources with a dual beam technique	
	Loretta Gregorini	Bologna	Polarization data on low luminosity radio galaxies and observations of bright radio galaxies	
	H. Waldthausen	MPI Bonn	A search for extended radio emission in Abell clusters of galaxies at 11.1 cm	
	Mark Birkinshaw	Cambridge	The hot gas content of clusters of galaxies	
	Jan Bystedt	Stockholm	The jet radio galaxy 30449	
	Ann Simon	Cambridge	On the beam model of double radio sources	
	R. A. Kandalian	Byurakan	Radio emission from Markarian galaxies	
1300	LUNCH			
1400	TOUR OF JODRELL BANK			

## MONDAY 17 JULY (continued)

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1630	Session 3		(Chairman: Dr Ian Morison)
	S. O. Kouzmin	Lebedev, Moscow	Investigations of Mars at millimeter wavelengths
	Alan Purvis	Cambridge	The new 3.6 hectare I.P.S. Array
	Vaclav Novotny	Ondrejov, Czechoslovakia	Aspects of receiver design
	Oldrick Kepka	Ondrejov, Czechoslovakia	Measurements of radio sources with respect to the stability of receivers in radio astronomy
	L. T. Walczowski	Kent, England	3 station interferometry of Cass A at 38 MHz
	P. A. Avon	Kent, England	Instrumentation for the Cass A project at Kent
1800	BUS LEAVES FOR ALLEN HALL		

In the evening there is an invited lecture by Professor F. G. Smith on "TELESCOPES - PAST, PRESENT AND FUTURE"

TUESDAY 18 JULY Schuster Building, Manchester

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Dr Robin Conway) (Chairman: SOLAR RADIO ASTRONOMY Session 4 0900 Results of a statistical analysis Berlin Diedrich Mohlmann of S-component radio emission Analysis of a high frequency Trieste Uros Koren pulsation during a complex radio event at 237 MHz Observations of solar type III bursts Zurich M. Perrenond with a digital spectrometer Polarization measurements of solar Ondre jov, Karel Jiricka radio bursts Czechoslovakia Polarization of solar radio bursts Torun Roman Schreiber at low frequencies and the relationship with mode coupling in the magnetosphere The characteristics of the quiet radio Leningrad V. N. Borovik Sun, and correlations with the phase of the solar activity cycle MHD wave interaction Charkov, Ukraine Yu. A. Sinitsyn 1030 COFFEE BREAK

1100 Session 5 LINE OBSERVATIONS OF GALAXIES (Chairman: Dr Les Hart)

Stuart Johnson Jodrell Bank Neutral hydrogen observations of Sbc spiral galaxies

Francois Viallefond Meudon HI study of the interacting galaxies NGC 4485 and 4490

Michael Reakes Cambridge The neutral hydrogen distribution of several peculiar galaxies

Mehmet Özel Ankara HI distribution and diffuse gamma rays

1215 LUNCH IN REFECTORY

1345	Session 6 GALACTIC	C RADIO ASTRONOMY	(Chairman: Dr Jim Cohen)
	Glenn White	Q.M.C. London	Observations of the $J = 1 \rightarrow 0$ and $2 \rightarrow 1$ transitions of CO in galactic sources
	Graeme Watt	Q.M.C. London	Observations of CO at 115 GHz in southern galactic HII regions
	V. I. Vassilkov	S.R.I. Moscow	Preliminary results of the quick survey of the Galactic plane in the $H_2O$ line at $\lambda 1.35$ cm
	P. W. Riley	Kent	Spectral line work in the 22-25 GHz range
	Ray Norris	Jodrell Bank	The structure and positions of OH masers
	Hans Ungerechts	MPI Bonn	Ammonia hyperfine structure in Dark Clouds
	C. Henkel	MPI Bonn	Interstellar $(^{12}C/^{13}C)$ ratio obtained from measurements of $H_2CO$
1530	TEA BREAK		
1615	Session 7 EXTRAGALA	CTIC RADIO ASTRONOM	Y (Chairman: Dr Dave Stannard)
	John Peacock	Cambridge	The brightest radio sources at 2.7 GHz
	G. V. Moorsel	Groningen	1D observations of a sample of bright sources with the WSRT
	V. H. Kapahi	Dwingeloo	Hot spots in extended extragalactic radio sources
	Pat Moore	Jodrell Bank	The structure of flat spectrum radio sources
	B. J. Geldzahler	MPI Bonn	Recent results from VLB interferometry
	Franco Mantovani	Bologna	Variability of extra-galactic radio sources at 408 MHz - the results of a 3 year monitoring programme
	K.P. Sokolov	Charkov, Ukraine	Observations of discrete radio sources with the UTR2 radio telescope
	N. S. Nesterov	Crimea	Rapid variability of extragalactic radio sources
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WEDNESDAY	19	JULY	Planetarium,	Jodrell	Bank
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ૃ 09 <b>3</b> 0	Session 8 GALACTIC AND EXTRAGALACTIC RADIO ASTRONOMY (Chairman: Dr Roy Booth)		
Li	A. I. Teplykh	Gorki	Probing the galaxy by Iinearly polarized radiation
	F. Toelle	MPI Bonn	The physical conditions in TMCl, a probable pre-solar nebula
	E. M. Grasshoff	MPI Bonn	Hl and OH observations of the dark cloud L134
	J. Wouterloot	Leiden	OH observations of the molecular cloud in Orion
	A. A. Shvetsov	Gorki	Investigation of cosmic emission in the atmospheric window $\lambda$ = 0.87 mm
	Chris Benn	Cambridge	A new 5C survey
1100	COFFEE BREAK		
1130	Session 9 RADIO SOUR	CE STATISTICS AND CO	OSMOLOGY (Chairman: Dr Ralph Spencer)
	Luigina Feretti	Bologna	Radio spectra properties of B2 quasars
	Jerzy Machalski	Krakow	Spectral properties of optically identified compact radio sources from the GB2 survey
	Yu. A. Kovalev	Moscow	Determination of cosmological parameters from radio observations of active galaxies and quasars satisfying the 'Hedgehog' model
	N. Roos	Leiden	Merging of galaxies, and the number density evolution of radio sources
	R. Windhorst	Leiden	WSRT observations of <b>GB</b> sources and possible consequences for radio source evolution
	M. Urbanik	Krakow	A search for possible effects influencing the angular distribution of radio sources
	J. G. Robertson	Dwingeloo	The cosmological evolution of radio sources

## 1415 (N.B. Parallel Sessions) Discussion Groups

Problems of map making from incomplete data (Chairman: Dr John Ponsonby) 1. LOCATION: Main lecture room

- to include the contributed papers by:

at Jodrell Bank

N. Van der Wal Atmospheric influences on WSRT Dwingeloo

measurements

Statistical methods of mapping sky Tim Cornwell Jodrell Bank

brightness

Jerzy Usowicz Torun Minimax entropy algorithm

2. Astronomy at millimetre wavelengths

- to include the contributed papers by:

(Chairman: Professor Rod Davies) LOCATION: M.Sc. lecture room at

Jodrell Bank

G. Rydbeck Onsala The Onsala 20m millimetre telescope;

the instrument and some recent results

Glenn White QMC, London Heterodyne receivers in the 1 mm region for molecular observations

with UKIRT

R. Padman Cambridge Astronomical objectives for the UKIRT

mm wave spectrometer

3. Stellar flares (Chairman: Prof. Sir Bernard Lovell)

LOCATION: Seminar Room at Jodrell Bank

- to include the contributed papers by:

S. A. Andrianov Leningrad Statistical characteristics of solar

radio emission

I. P. Pogodin

Leningrad

Some features of sporadical solar

radio emission

Cesare Zanelli

Trieste

Evidence for periodic structures in

noise storm emission

R.J. Davis

Jodrell Bank

Studies of flare stars at Jodrell Bank

TEA BREAK, FOLLOWED BY CONFERENCE OUTING, DINNER AT JODRELL BANK, 1545 AND MUSICAL SOIREE.