ELEMENT ABUNDANCES

Object	T_e	n_e	[O/H]	[N/H]
Mr 7				
K1	9100	30	8.46	7.04
K2	8800	760	8.47	7.30
K3	9600	60	8.61	7.07
K3'	9880	50*	8.51	6.77
K3"	9200	260	8.55	7.18
K4	9200	320	8.43	6.75
K5	8600	160	8.51	7.05
K5'	8600	50*	8.49	6.95
K6	9100	570	8.42	6.95
K6'	8500	720	8.54	7.07
K7	8700	160	8.50	7.14
Mr 256				
<K1>	10600	165	8.28	6.88
<K2>	7350	50*	8.69	7.41
K3	6350	50*	8.99	7.87
NK3	6100	50*	9.00	7.90
K5	7450	70	8.72	7.56
Mr 297				
K1	7300	1300	8.85	7.57
K2	8600	600	8.58	7.05
K3	7500	550	8.76	7.49
K4	8600	100*	8.58	7.44
K5	8200	100*	8.58	7.41
K5'	8500	550	8.53	7.28
K6	8900	1350	8.58	7.06
K7	8300	100*	8.60	7.33
Mr 325				
K1	8100	50*	8.57	7.32
K1'	8650	160	8.58	7.20
K2	8550	120	8.55	7.34
K2'W	8300	50	8.62	7.33
K2'E	8780	490	8.56	7.20
K3	8270	350	8.63	7.50
K3'	9520	375	8.64	7.23
K4	8080	50*	8.61	7.47
K5	9320	430	8.60	7.03
MK25	7860	900	8.76	7.41
K6	7450	50*	8.64	7.68
MK36	7900	470	8.71	7.46
Mr 907				
Nucleus	9250	125	8.49	7.47
K1	8100	95	8.48	7.58
K2	8800	65	8.47	7.38
K3	8750	240	8.50	7.52
K4	9050	250	8.47	7.44
K5	9300	50*	8.50	7.24

central part of spirals, as K1 in Mr 297 or K3 in Mr 256).

We propose the following brief explanations. CIG are mainly interacting systems (mergers). Interactions trigger local starbursts in a galaxy, but they start at different times in different regions. The delay between ejection of O and N explains a wider spread of N abundances than O over all galaxy. Some excess of [S II] fluxes in the spectra of H II CIG in comparison with H II Irr or SpG may be explained by stronger shock wave heating of gas in regions of starburst. A smaller similar excess is present in giant H II regions of BCG and Irr (Fig. 4, Burenkov 1991). The O and N determinations are listed in the table as [X/H]=12+log(X/H). The value of n_e for R[S II]>1.50 is equal to 50 sm^{-3} and marked as $*$.

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[1] Special Astrophysical Observatory of Rus.Ac.Sci., Nyzhnij Arkhyz, Russia.

FIRST LIGHT ON AN IR BRIGHT GALAXY USING THE *ISO* LONG WAVELENGTH SPECTROMETER: THE ANTENNAE

J. Fischer[1,16], L. M. Shier[1], M. L. Luhman[1], S. Satyapal[2,16], H. A. Smith[2], G. J. Stacey[3], S. J. Unger[4], M. A. Greenhouse[2], L. Spinoglio[5], M. A. Malkan[6], S. D. Lord[7], J. W. Miles[2], M. A. Shure[8,16], P. E. Clegg[9], P. A. R. Ade[9], C. Armand[10], M. Burgdorf[10], S. Church[11], G. R. Davis[12], A. Di Giorgio[10], D. Ewart[10], I. Furniss[13], W. M. Glencross[13], C. Gry[10,14], T. Lim[10], S. Molinari[10], Q. Nguyen-Rieu[15], M. C. Price[10], S. D. Sidher[10], A. Smith[10], B. M. Swinyard[4], D. Texier[10], N. R. Trams[10], and M. G. Wolfire[2]

One of the most important discoveries resulting from *IRAS* was that many galaxies emit a large fraction of their energy in the far IR and that a significant number of these have luminosities of 10^{12} $L_\odot$ or more. Many of these galaxies appear to be colliding or merging pairs. Theories on the role played by mergers in galaxy evolution are consistent with a variety of origins for the high IR luminosity observed in mergers, e.g., shocks produced by cloud-cloud collisions, exceptional bursts of star formation, or reradiation by dust surrounding a hidden active galactic nucleus. In all of these scenarios, the presence of copious amounts of gas and dust renders attempts to determine the dominant physical processes a challenging endeavor. The central regions of many of these galaxies are highly obscured, even at near IR wavelengths. The extragalactic pro-