

60 inch Telescope Log		Spectrograph: <u>FAST</u>				
Observer: <u>P Berlin</u>		Grating: <u>300R</u>			Page: <u>7239</u>	
PI: <u>Muzerolle - Hutchon</u>		Date: <u>4/10/99</u>				
Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	DARK				15s	
11-20	BIAS				6s	
21-30	FLAT				7s	clouds to S
31-40	BIAS				0s	
41-50	FLAT				14s	
51-55	sky				7s	
56	WMP					
57-59	HD 52971			59	4s	
60	WMP			r		
61	ZM070539.9	07.05	+20.39	68	6m	
62	WMP			r		
63	ZM060529.7	06.05	+27.55	68	8m	
64	WMP			r		
65	ZM060522.1	06.12	+13.01	68	10m	A's to E/W
66	WMP			r		
67	ZM060518.1	06.15	+12.29	68	10m	* + E
68	WMP			r		
69	M51513	06.56	+04.48	82	20m	Faint comp to NW
70	WMP			r		
71	M52514	06.57	+09.35	82	20m	
72	WMP			r		
73	M 50709	06.58	+10.01	82	20m	
74	WMP			r		
75	ZM070404.38	07.49	+18.85	68	20m	
76	WMP			r		
77	SN1999ac	08.27	+21.29	Z	20m	PA=70
78	WMP			r		
79-80	Fery 34	10.36	+43.21	56	90s	
81	WMP			r		

60 inch Telescops Log

Observer: PB

PI: JPH

Spectrograph: FAST

Grating: 3000

Date: 4/10/99

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
82	MRK421	11:01	+38:28	6	4m	
83	WMP			↑		
84	N4051	12:20	+44:48	6	2m	
85	WMP			↑		
86	N4151	12:08	+39:41	6	30s	
87	WMP			↑		
88	N3227	10:20	+20:07	6	3m	
89	WMP			↑		
90	ZM1016398	10:16	+13:52	68	1m	
91	WMP			↑		
92	ZM1017149	10:17	+15:03	68	15m	a few clouds
93	WMP			↑		
94	ZM101536.1	10:15	+14:13	68	5m	
95	WMP			↑		
96	ZM101610.2	10:16	+14:45	68	7m	
97	WMP			↑		
98	SN1999bg	12:01	+62:30	2	15m	PA=0
99	WMP			↑		
100	ZM101711.0	10:17	+16:52	69	10m	
101	WMP			↑		
102	ZM101806.1	10:18	+15:57	68	10m	
103	WMP			↑		clouds
104	ZM101855.3	10:18	+16:10	68	12m	
105	WMP			↑		
106	ZM101913.1	10:19	+15:10	68	9-	
107	WMP			↑		
108	ZM101910.5	10:19	+15:49	68	8m	
109	WMP			↑		
110	ZM115135.3	11:51	+17:55	68	4m	
111	WMP			↑		

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PI: <u>JPH</u>		Date: <u>4/11/99</u>				
Number	Object	R.A.	Dec.	L/R	Exp	Comments
112	ZM1153216	11:53	+14:25	68	6m	
113	WMP			↑		
114	ZM115714.3	11:57	+13:41	68	8m	
115	WMP			↑		
116	ZM115842.9	11:58	+19:08	68	6m	
117	WMP			↑		
118	ZM115926.5	11:59	+27:01	68	7m	more clouds
119	WMP			↑		windy
120	ZM115951.2	11:59	+20:39	68	5m	* to E
121	WMP			↑		
122	In fall. c. 21	13:10	+24:51	64	20m	em ok
123	WMP			↑		
124	ZM120920.2	12:09	+14:73	68	6m	
125	WMP			↑		
126	ZM120958.0	12:09	+19:55	68	6m	
127	WMP			↑		
128	ZM121051.2	12:10	+14:52	68	6m	
129	WMP			↑		
130	ZM121150.9	12:11	+13:23	68	6m	
131	WMP			↑		
132	ZM121314.0	12:13	+21:47	68	6m	
133	WMP			↑		
134	ZM121401.4	12:14	+23:60	68	7m	
135	WMP			↑		
136	ZM121422.6	12:14	+22:11	68	6m	
137	WMP			↑		
138	322, 056657	12:57	+29:39	64	20m	
139	WMP			↑		
140	ZM131156.1	13:11	+12:21	68	5m	
141	WMP			↑		

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
142	ZM131820.1	13:18	+28:37	68	5m	
143	COMP			↑		
144	ZM132136.0	13:21	+26:34	68	5m	
145	COMP			↑		
146	ZM132225.6	13:22	+15:28	68	4m	
147	COMP			↑		
148	H244	13:21	+26:21	56	2m	PA=88
149	COMP			↑		
150	MAK209	13:51	+69:33	6	3m	PA=90
151	COMP			↑		
152	N5548	14:15	+25:22	6	3m	
153	COMP			↑		
154	ZM132356.5	13:23	+15:24	68	6m	
155	COMP			↑		
156	ZM132533.9	13:25	+13:04	68	10m	
157	COMP			↑		
158	ZM132704.6	13:27	+24:45	68	5m	
159	COMP			↑		
160	ZM132721.8	13:27	+13:07	68	4m	
161	COMP			↑		
162	ZM132742.8	13:27	+18:51	68	5m	
163	COMP			↑		
164	ZM132814.8	13:28	+28:41	68	4m	
165	COMP			↑		
166	SN1999ac	16:07	+07:58	2	15m	PA=24
167	COMP			↑		
168	ZM133111.4	13:51	+23:23	68	4m	PA=90 fl's - no gal X
169	COMP			↑		clouds.
170	ZM164135.8	16:41	+15:17	68	10m	
171	COMP			↑		

