

60 inch Telescope Log		Spectrograph: <u>FAST</u>				
Observer: <u>CALVINS</u>		Grating: <u>300L</u>			Page: <u>7252</u>	
PI: <u>All, Muse collector, theora</u>		Date: <u>4/13/99</u>				
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	VARIC				15m	
11-20	BIAS				0s	
21-30	FLAT				6s	
31-40	BIAS				0s	
41-50	FLAT				12s	
51-55	sky			#57	5s	
56	comp					
57	Feige 34	10 39	43 06	*56	90s	
58	comp			↑		
59	Feige 34	10 39	43 05	*56	90s	RA = 75°
60	comp			↑		
61	M3227	10 23	19 51	*6	3m	
62	comp			↑		
63	Akn120	5 16	-00 08	*6	4m	central spectra
64	comp			↑		
65	MDS2971	7 00	27 09	*57	5s	
66	comp			↑		
67	MCS1774	6 40	9 42	*82	30m	
68	comp			↑		
69, 70	M61039	6 41	9 53	*82	30m	
71	comp			↑		
72	2M101937.7p	10 19	22 42	*68	6m	
73	comp			↑		
74	2M101942.1p	10 19	13 14	*68	5m	
75	comp			↑		
76	2M102017.5p	10 20	18 55	*68	6m	star east
77	comp			↑		
78	2M102024	10 20	21 21	*68	4m	
79	comp			↑		
80	2M102117.6p	10 21	23 49	*68	5m	

chip gain calcs a little low  
 noise ~ 7.9  
 gain ~ 1.1

## 60 inch Telescope Log

Observer: CNUKJWSSpectrograph: FASTGrating: 300LPage: 7253PI: Huchra, Kirshner, Justin, GellerDate: 4/13/99

Number	Object	R.A.	Dec.	L/R	Exp	Comments
81	comp			↑		
82	ZM102128.0p	10 21	23 58	#68	4m	star west
83	comp			↑		
84	ZM102137.1p	10 21	14 06	#68	3m	
85	comp			↑		
86	ZM102145	10 21	22 41	#68	4m	
87	comp			↑		
88	ZM102155	10 21	20 59	#68	5m	
89	comp			↑		
90-92	sn1998S	11 46	47 28	#2	20m	
93	comp			↑		
94	sn1999an	12 01	14 05	#2	10m	
95	comp			↑		
96	A1644DS097	12 58	17 13	#81	20m	
97	comp			↑		
98	A1644DS106	12 57	17 09	#81	20m	
99	comp			↑		
100	Z006257	12 59	28 53	#64	2m	
101	comp			↑		
102	Z007312	13 09	24 34	#64	5m	
103	comp			↑		
104	Z007392 E	13 02	27 38	#64	3.5m	
105	comp			↑		
106	Z007394	13 09	29 22	#64	3.5m	
107	comp			↑		
108	Z008491	13 08	24 41	#64	5m	
109	comp			↑		
110	Z008580	12 58	28 56	#64	2m	
111	comp			↑		
112	Z008586.5	12 58	28 08	#64	7m	

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 PI: Geller, Koranyi, Huchra  
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Number	Object	R.A.	Dec.	L/R	Exp	Comments
113	comp			↑		
114	2009922	13 07	24 48	#64	6m	
115	comp			↑		
116	2010039	13 58	27 58	#64	3m	
117	comp			↑		
118	2010044	13 10	29 42	#64	10m	
119	comp			↑		
120	2013746-5	12 56	27 38	#64	8m	
121	comp			↑		
122	2013754	12 59	28 55	#64	3m	- Last one!
123	comp			↑		
124	mkw12-i.039	13 58	8 45	#35	8m	
125	comp			↑		
126	mkw12-i.041	14 03	8 16	#35	20m	
127	comp			↑		
128	mkw12-i.043	14 06	10 21	#35	15m	
129	comp			↑		
130	mkw12-i.044	13 59	9 32	#35	17m	
131	comp			↑		
132	2M164430	16 44	16 19	#68	5m	star west
133	comp			↑		
134	2M164451	16 44	22 21	#68	8m	
135	comp			↑		
136	2M164456	16 44	21 46	#68	8m	
137	comp			↑		
138	2M165103	16 51	20 17	#68	7m	
139	comp			↑		
140	2M165222	16 52	23 42	#68	12m	
141	comp			↑		
142	2M165251	16 52	17 26	#68	7m	

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Observer: CALKINS

PI: Hudara, Kirshner

Spectrograph: FAST

Grating: 300L

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
143	comp			↑		
144	ZM165320	16 53	22 00	<sup>15</sup> 68	4m	
145	comp			↑		
146	ZM165323	16 53	17 51	<sup>15</sup> 68	9m	
147	comp			↑		
148	ZM165438	16 54	24 05	<sup>15</sup> 68	2m	
149	comp			↑		
150	SN-IC1254	17 11	72 24	<sup>15</sup> 2	20m	PA=0°
151	comp			↑		
152	ZM170203	17 02	18 59	<sup>15</sup> 68	5m	
153	comp			↑		
154	ZM170527	17 05	22 18	<sup>15</sup> 68	5m	
155	comp			↑		
156	ZM170547	17 05	18 24	<sup>15</sup> 68	10m	
157	comp			↑		
158	BDP332642	15 51	32 55	<sup>15</sup> 6	1m	
159	comp			↑		
160-169	BIAS				0s	
170-179	FLAT				6s	
180-189	BIAS				0s	
190-199	FLAT				12s	
200-209	DARK				15m	