

IDS Report of Brenda Dingus

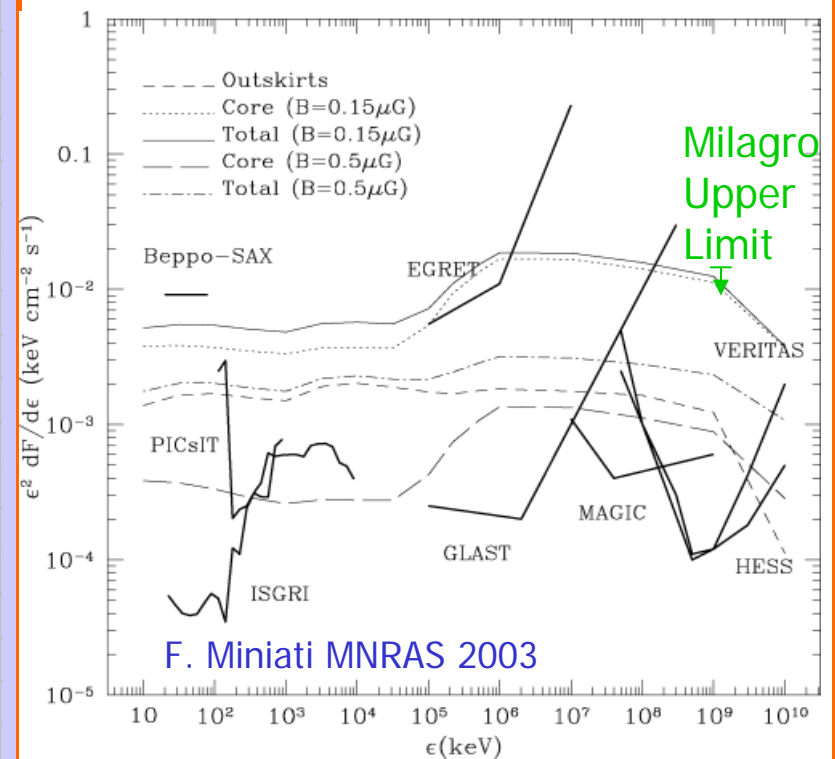
24 March 2005

- Searching Milagro Data for TeV emission from Galaxy Clusters
- Investigating Future Large Field of View TeV Observatories
- Continuing EGRET Archival Analysis of GRBs in BATSE and TASC
- Monitoring Milagro Data for SWIFT detected GRBs
- Presenting GLAST/EGRET at International Meetings
 - Moriond in Italy, March 2005
 - ICRC in India, August

Milagro TeV Search for Clusters

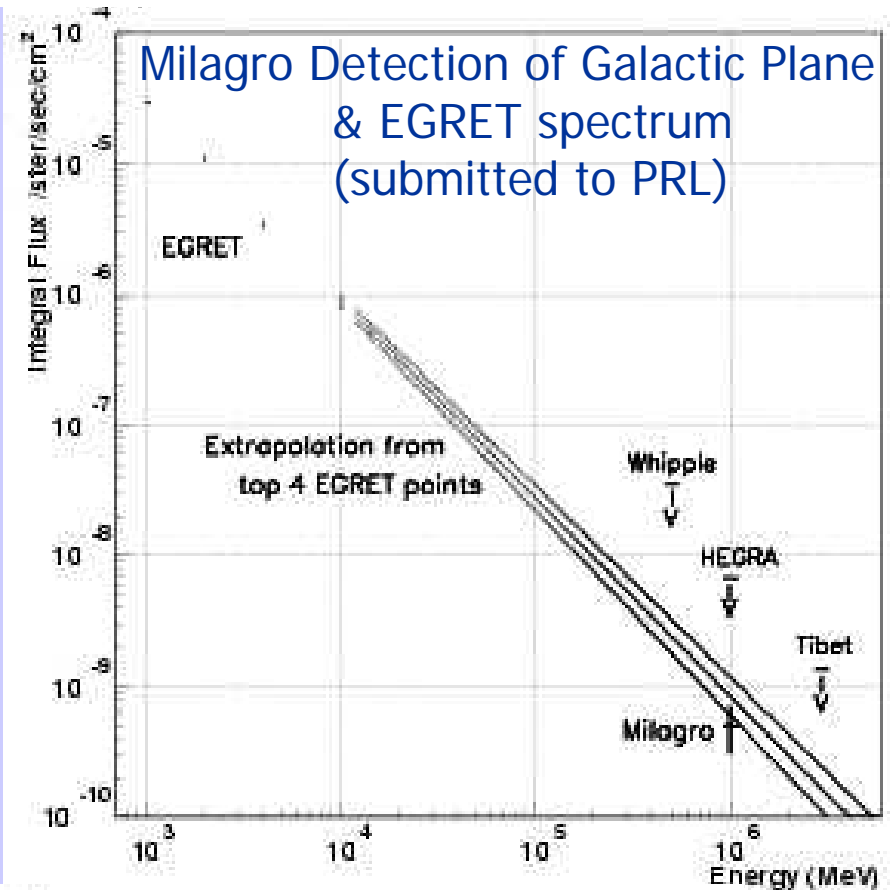
Cluster Name	RA	DEC	z	sigma*	upper limit (ergs/cm ² sec)	
					@0.1 GeV #	@1 TeV +
A262	28.20	36.15	0.0161	0.4	1.1E-11	4.2E-12
AWM7(2A0251+413)	43.62	41.58	0.0180	0.3	6.1E-12	4.7E-12
A399	44.48	13.03	0.0720	0.5	8.7E-12	4.5E-11
A401	44.74	13.58	0.0750	0.5	1.6E-11	4.8E-11
A426(Per Cluster)	49.96	41.51	0.0184	0.4	6.5E-12	5.0E-12
A478	63.35	10.47	0.0900	-0.2	9.0E-12	6.5E-11
3C129(3A0446+449)	72.24	45.03	0.0223	2.1	9.3E-12	1.0E-11
A576	110.35	55.74	0.0380	-0.4	6.1E-12	8.7E-12
A1367	176.12	19.84	0.0215	1.3	4.8E-12	9.5E-12
Virgo Cluster	187.50	13.20	0.0038	-1.2	3.8E-12	1.8E-12
Coma Cluster	194.90	27.96	0.0238	1.8	6.7E-12	9.5E-12
A1775	205.46	26.38	0.0722	1.2	6.1E-12	2.8E-11
A1795	207.23	26.59	0.0630	0.8	7.0E-12	2.0E-11
A2065	230.68	27.71	0.0600	2.3	9.7E-12	2.8E-11
A2142	239.58	27.23	0.0899	-1.5	8.7E-12	1.4E-11
A2147	240.57	15.89	0.0356	-0.5	1.3E-11	8.6E-12
A2199	247.16	39.55	0.0299	0.2	1.6E-11	6.4E-12
A2244	256.03	35.66	0.0970	1.7	7.6E-12	4.3E-11
A2255	258.18	64.07	0.0808	1.7	8.8E-12	1.1E-10
A2319	290.30	43.94	0.0560	-0.7	6.7E-12	8.9E-12
Cyg A Cluster	299.86	40.74	0.0570	-1.7	7.8E-12	6.3E-12

Accretion Shocks Prediction for Coma Cluster

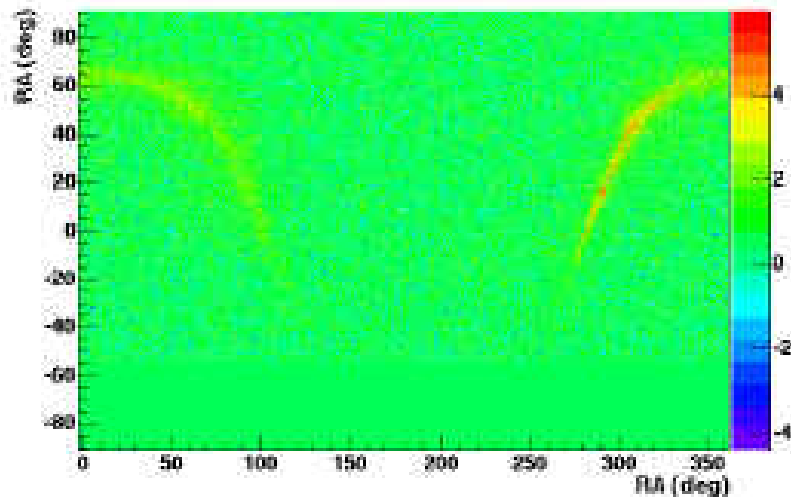


HAWC & miniHAWC: Large field of view TeV observatories

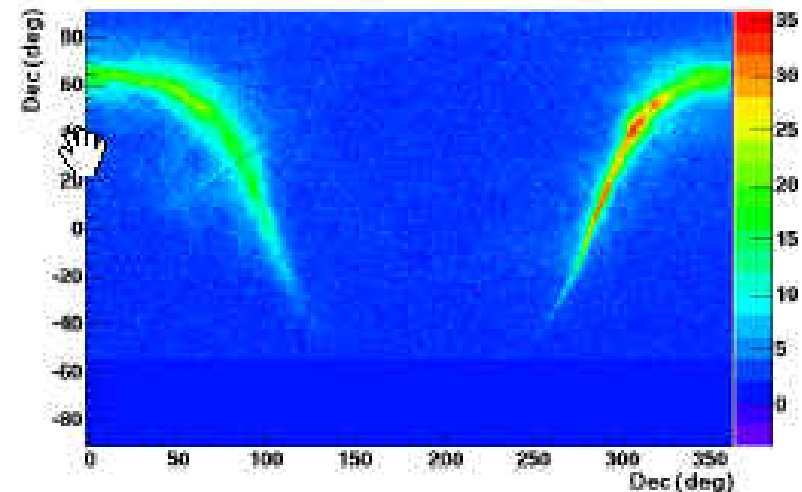
- HAWC is 10x size of Milagro at ~4500 m elevation
- miniHAWC is moving Milagro PMTs with slight geometry changes to ~4500 m elevation
- Simulations of Galactic Plane by Andy Smith at Univ. of Maryland



miniHAWC



HAWC



Possible DC2 Involvement

- >10 GeV catalog and identification of high energy transients
 - Algorithms to search for AGN flares of interest to TeV observatories
- Joint GBM & LAT spectral fits of GRBs
 - Spectral evolution during shortest time intervals possible (i.e. when LAT observes $O(10)$ γ -rays)