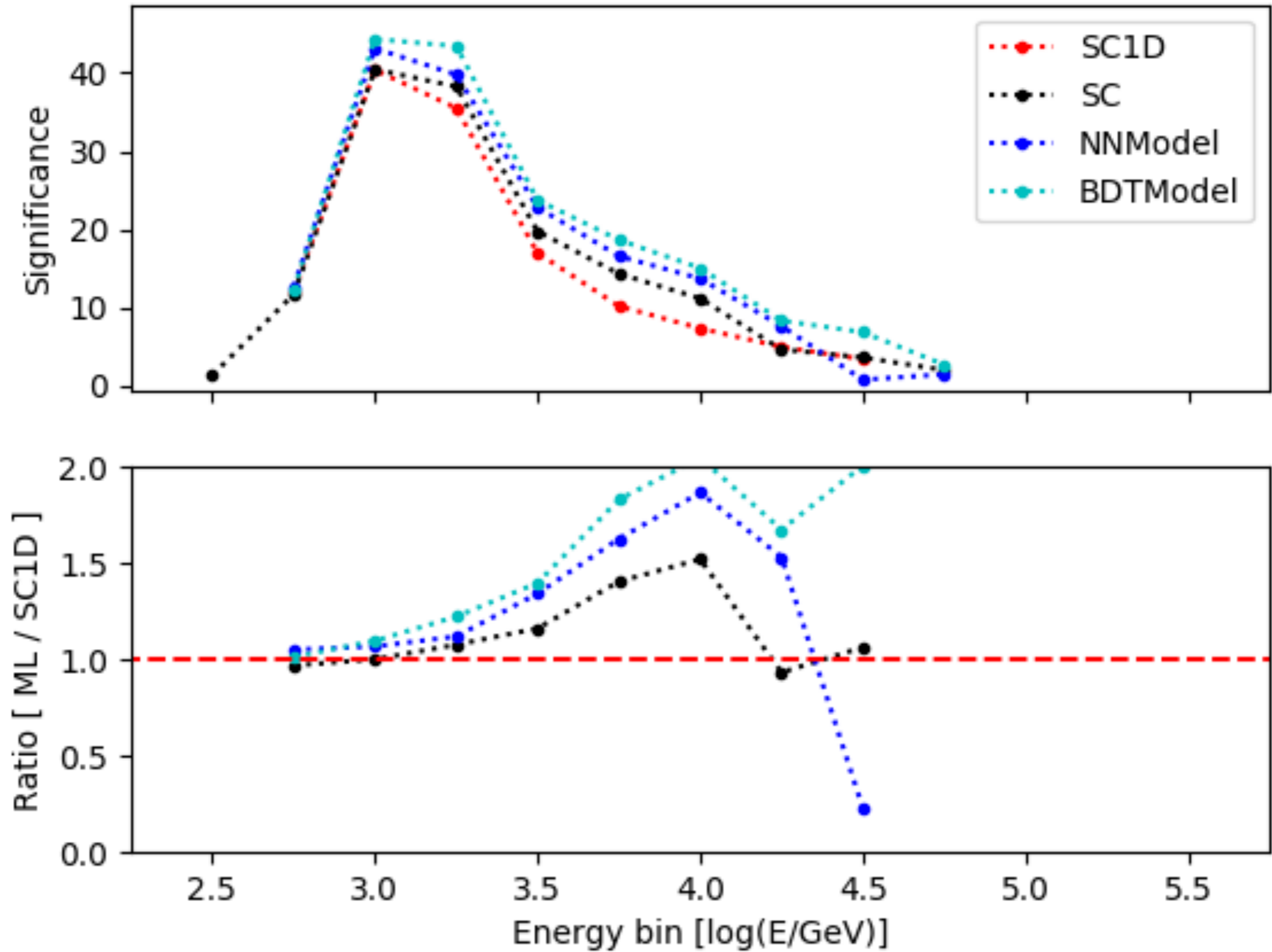


# Data

## Models:

- SC = PINC & Compactness (cuts from Crab paper 2017)
- SC1D = PINC & LIC, one per fhit & ebin
- NNModel = NN trained
- BDTModel = BDT trained

Significance at Crab position of fhit 3



# Crab

<b>fbin</b>	<b>SC1D</b>	<b>SC</b>	<b>NNModel</b>	<b>BDTModel</b>	<b>SC SC1D</b>	<b><u>NNModel</u> SC1D</b>	<b>BDTModel SC1D</b>
<b>0</b>		15.16	14.69	15.99			
<b>1</b>	26.86	27.57	27.47	28.22	1.03	1.02	1.05
<b>2</b>	37.77	44.13	44.60	46.36	1.17	1.18	1.23
<b>3</b>	59.22	62.39	66.14	71.97	1.05	1.12	1.22
<b>4</b>	70.59	69.71	76.34	76.15	0.99	1.08	1.08
<b>5</b>	67.28	71.33	69.74	80.05	1.06	1.04	1.19
<b>6</b>	48.32	48.32	48.32	65.99	1.00	1.00	1.37
<b>7</b>	39.10	47.70	49.18	50.32	1.22	1.26	1.29
<b>8</b>	27.59	32.75	35.10	34.84	1.19	1.27	1.26
<b>9</b>	28.16	28.70	31.34	31.29	1.02	1.11	1.11
<b>1-9</b>	144.03	155.74	156.87	170.69	1.08	1.09	1.19
<b>0-9</b>		156.33	157.45	171.31			

# Mrk 421

<b>fbin</b>	<b>SC1D</b>	<b>SC</b>	<b>NNModel</b>	<b>BDTModel</b>	<b>SC SC1D</b>	<b><u>NNModel</u> SC1D</b>	<b>BDTModel SC1D</b>
<b>0</b>		8.46	8.28	8.40			
<b>1</b>	11.88	13.17	12.46	13.01	1.11	1.05	1.10
<b>2</b>	16.21	16.23	15.59	16.59	1.00	0.96	1.02
<b>3</b>	19.04	18.90	19.85	21.16	0.99	1.04	1.11
<b>4</b>	21.56	19.50	21.91	20.74	0.90	1.02	0.96
<b>5</b>	16.48	14.95	15.50	17.61	0.91	0.94	1.07
<b>6</b>	9.74	9.31	8.44	11.00	0.96	0.87	1.13
<b>7</b>	4.17	5.59	7.16	6.86	1.34	1.72	1.65
<b>8</b>	1.20	1.42	1.14	0.51	1.18	0.95	0.43
<b>9</b>							
<b>1-9</b>	35.86	35.26	35.96	38.63	0.98	1.00	1.08
<b>0-9</b>		36.04	36.64	39.31			

# Mrk 501

<b>fbin</b>	<b>SC1D</b>	<b>SC</b>	<b>NNModel</b>	<b>BDTModel</b>	<b><u>SC</u> SC1D</b>	<b><u>NNModel</u> SC1D</b>	<b><u>BDTModel</u> SC1D</b>
<b>0</b>							
<b>1</b>	3.38	3.79	4.22	4.59	1.12	1.25	1.36
<b>2</b>	4.53	2.89	3.07	3.74	0.64	0.68	0.83
<b>3</b>	4.69	5.34	4.46	4.24	1.14	0.95	0.90
<b>4</b>	5.12	5.13	6.15	4.41	1.00	1.20	0.86
<b>5</b>	4.12	3.76	4.30	5.67	0.91	1.04	1.38
<b>6</b>	3.77	4.95	2.01	5.65	1.31	0.53	1.50
<b>7</b>	1.57	2.24	2.51	2.90	1.43	1.60	1.85
<b>8</b>	2.58	2.67	2.31	2.89	1.03	0.90	1.12
<b>9</b>	1.96	1.12	2.44	2.03	0.57	1.24	1.04
<b>1-9</b>	10.25	10.62	10.20	11.94	1.04	1.00	1.16
<b>0-9</b>		10.63	10.11	11.90			

# 2HWC

There are 35 sources in the list

Model	# sources that is better than SC	%
SC	31	88.6%
NNModel	24	68.6%
BDTModel	26	74.3%