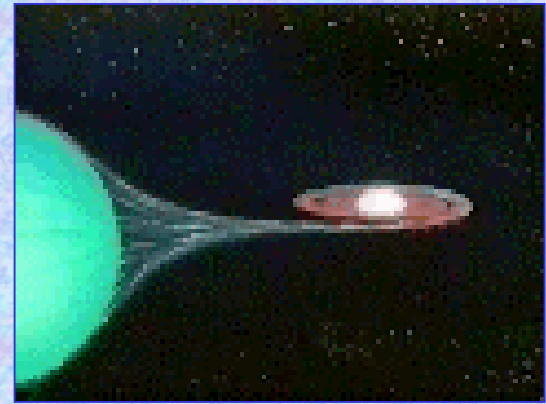


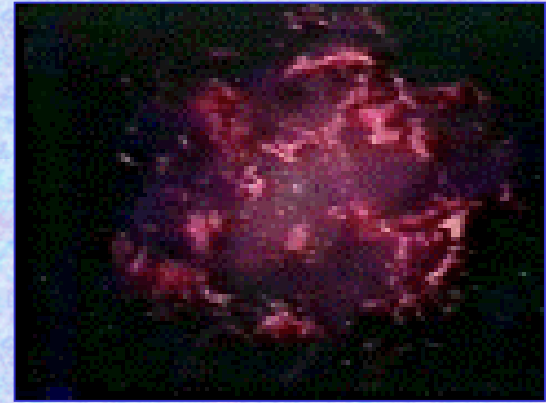
IASF-Sezione di Palermo

Attività Osservativa in Astronomia X e Gamma

Binarie X



Pulsar Isolate



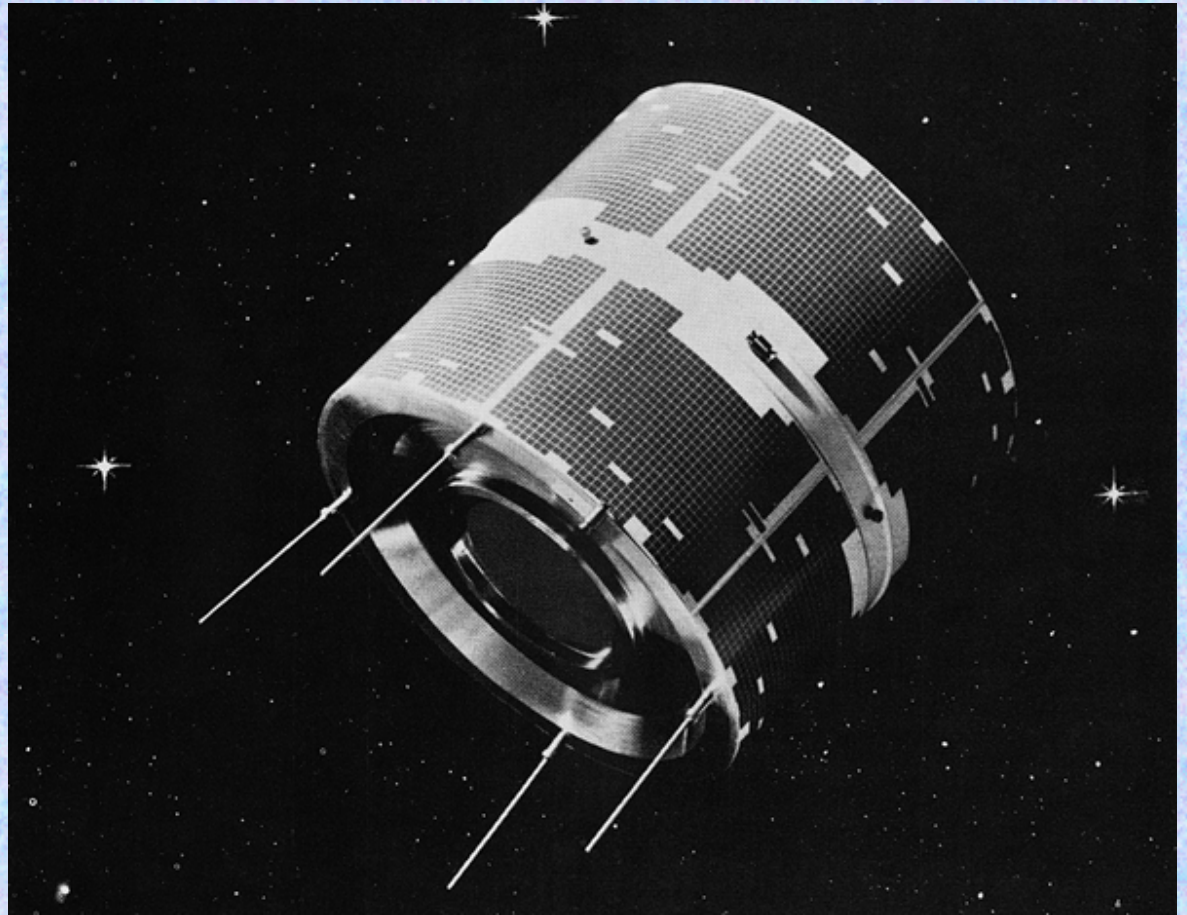
Gamma Ray Burst



COS B

1975-1982

Energy range: > 30 MeV



FIGARO

1986-1992

Energy range: 0.15-4 MeV

Crab pulsar

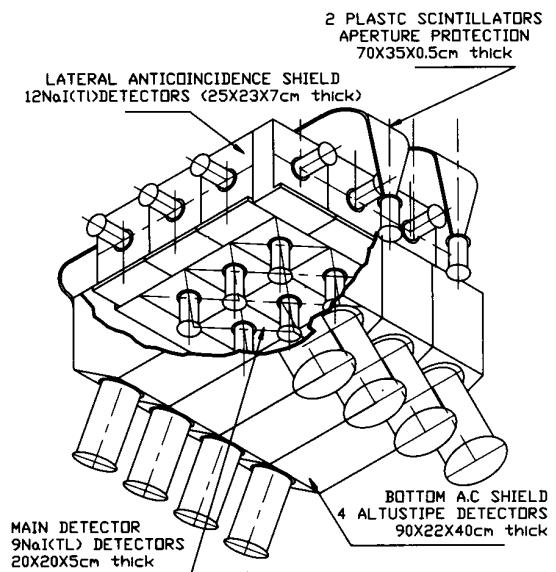
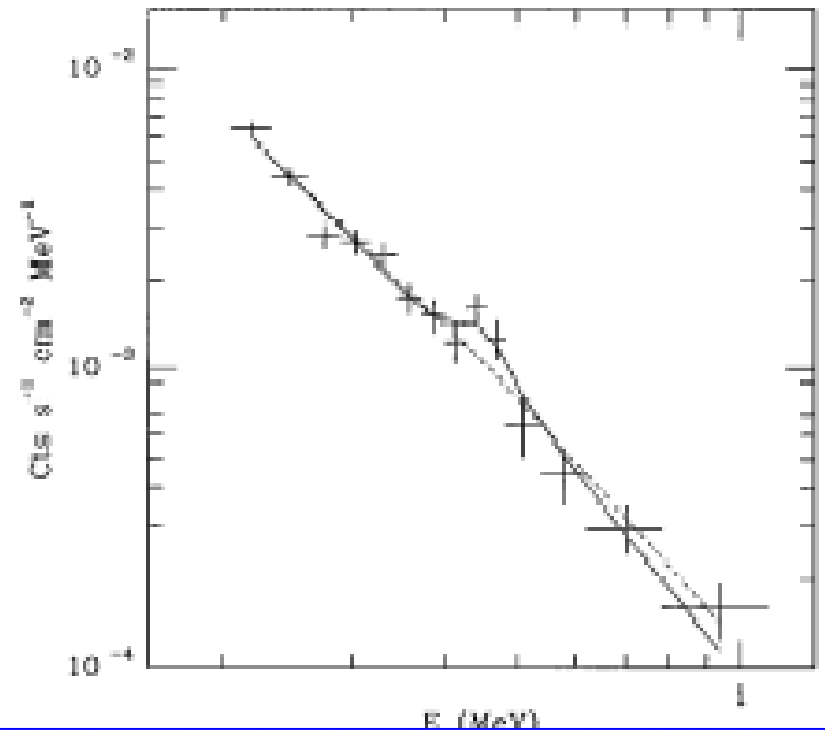
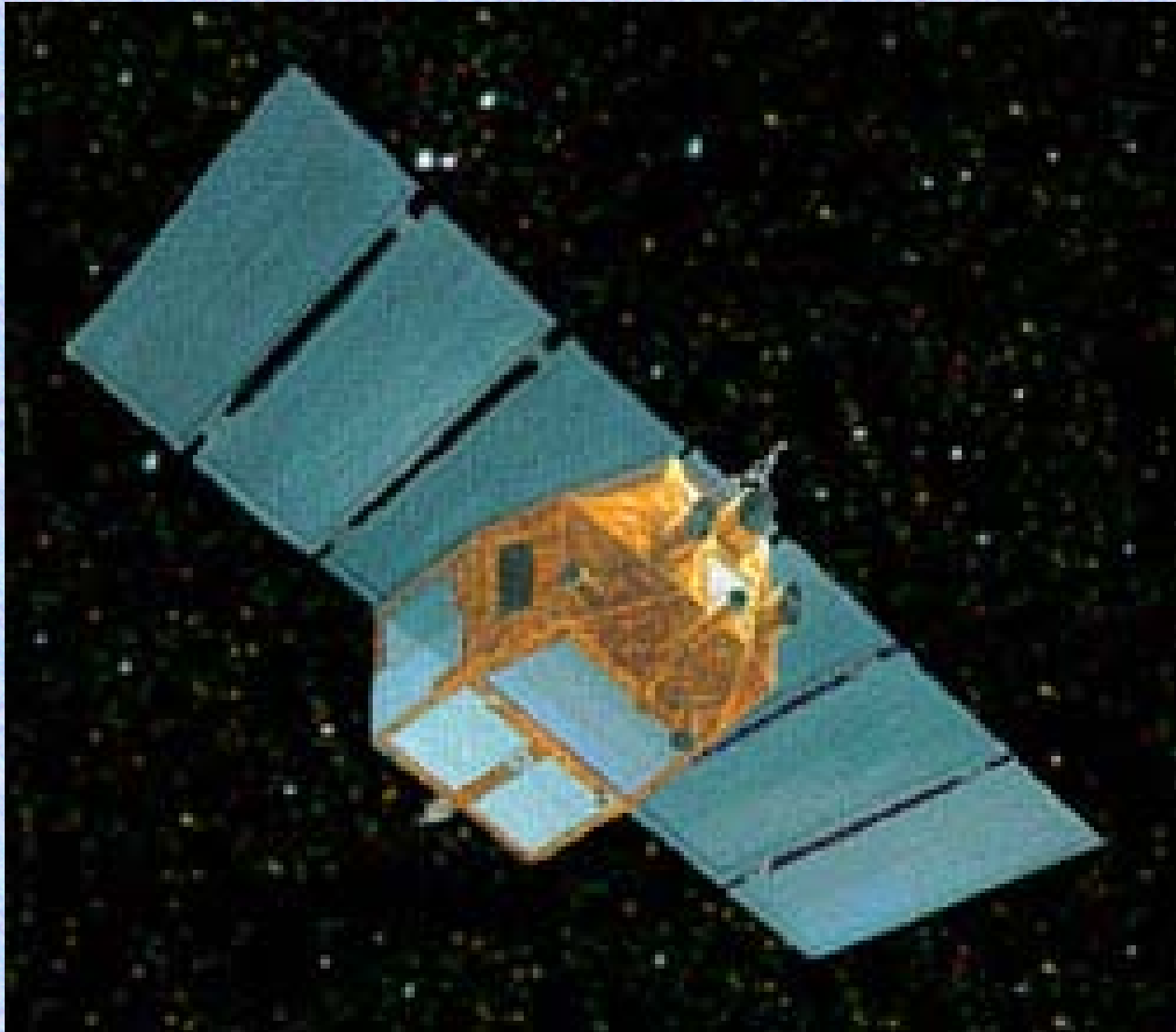


Fig. 1. General view of the FIGARO II experiment.



Massaro et al. 1991

BeppoSAX

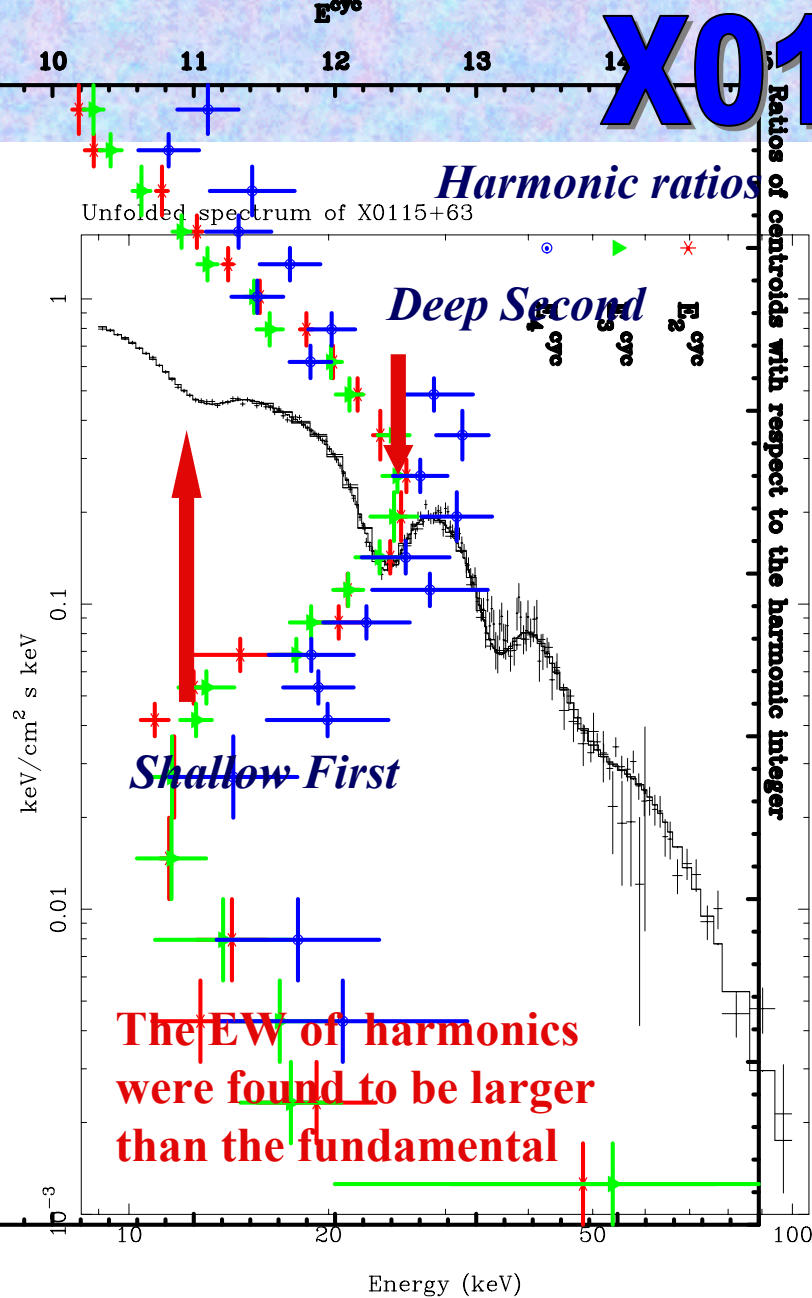


X0115+63

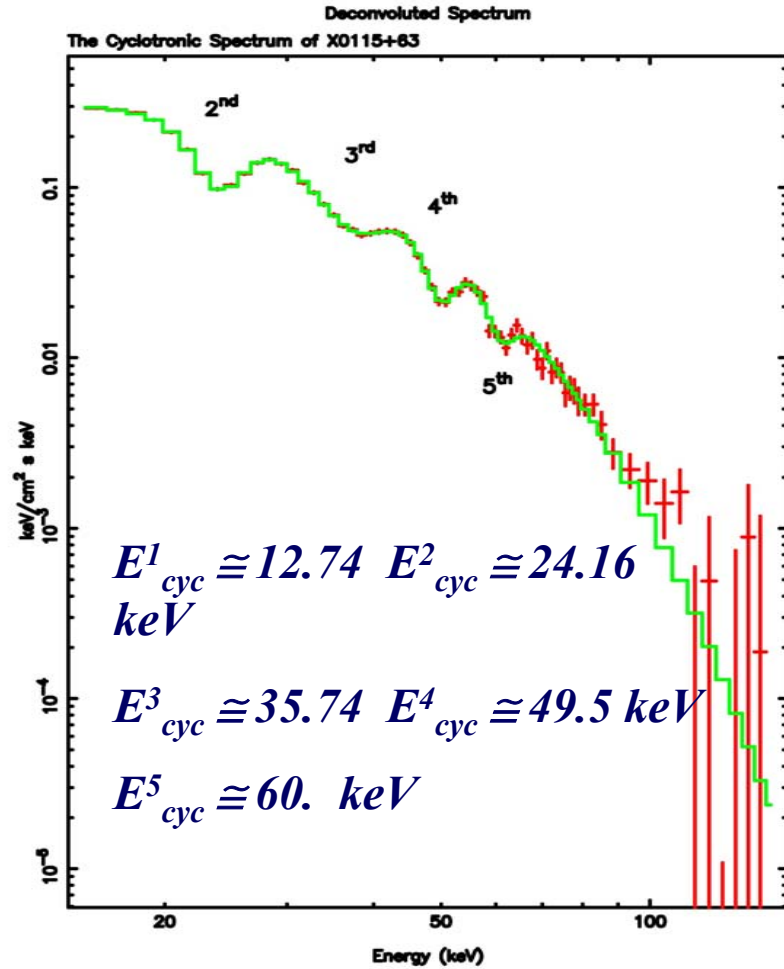
cts/sec

150

200



1:(1.9±0.05):(2.8±0.05):(3.9±0.1)

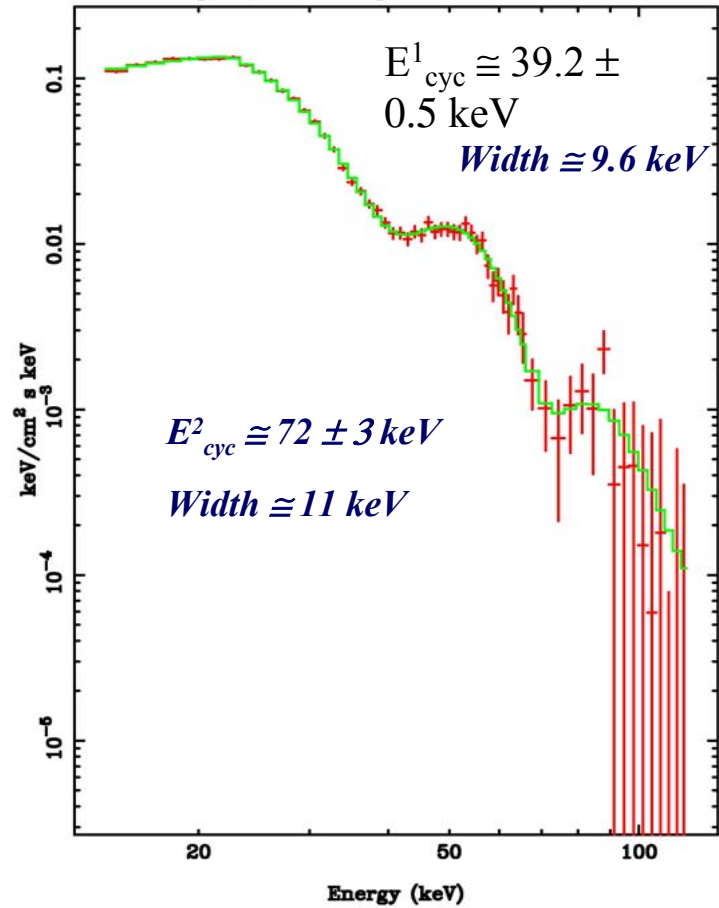


4.0 - 30.1 KeV

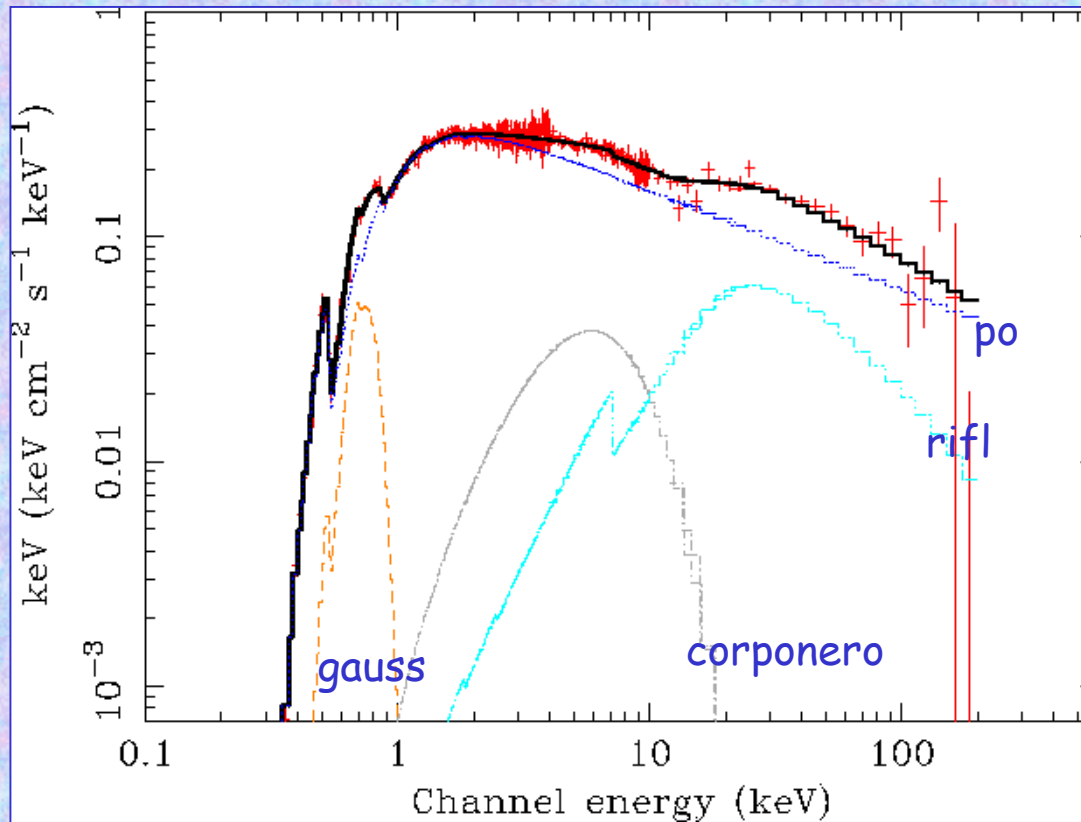
Hercules X-1

Her X-1: BeppoSAX observation, Main on October 2000

Fall of the peak, unfolded spectrum

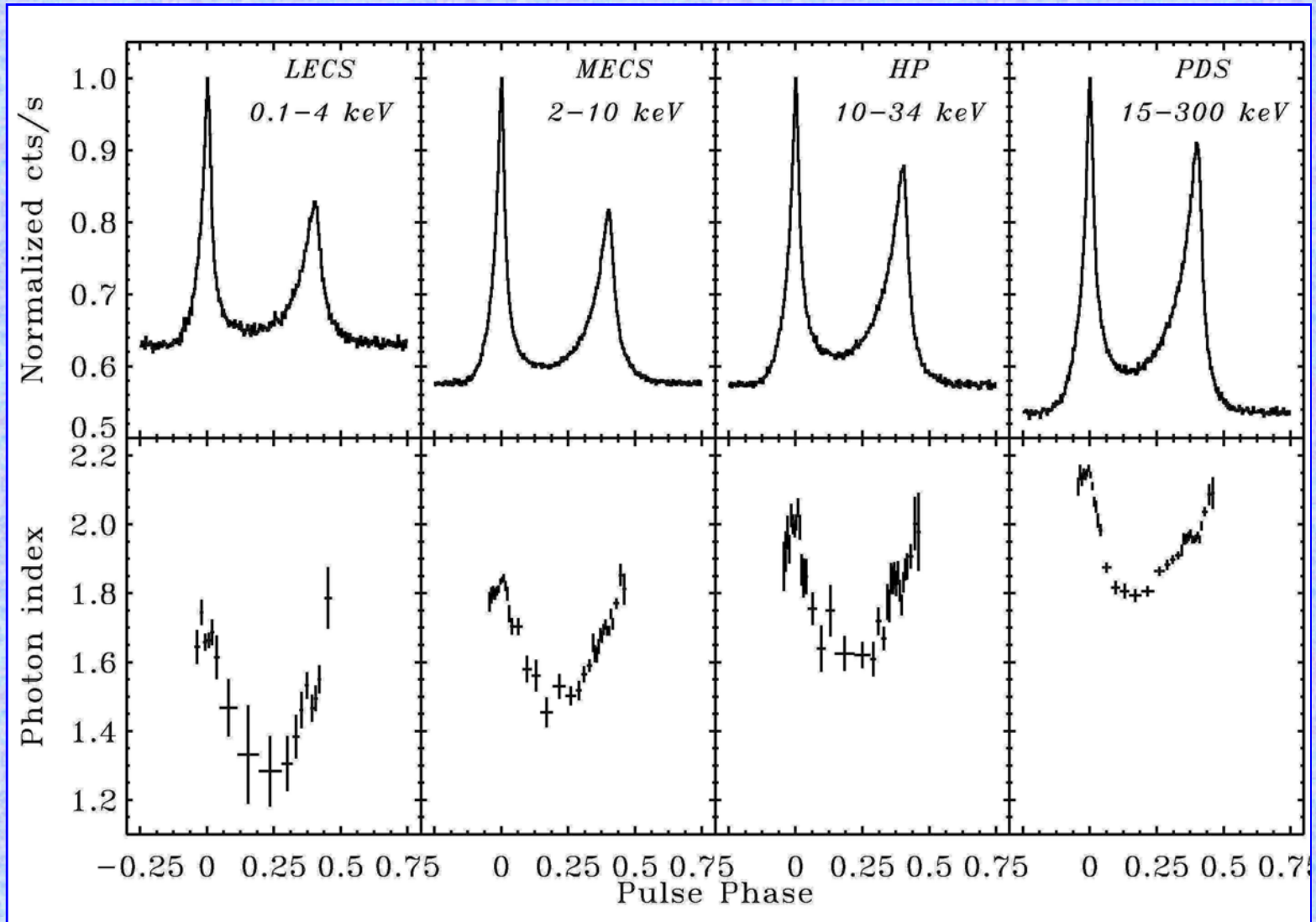


4U0614+091



Piraino et al 1999

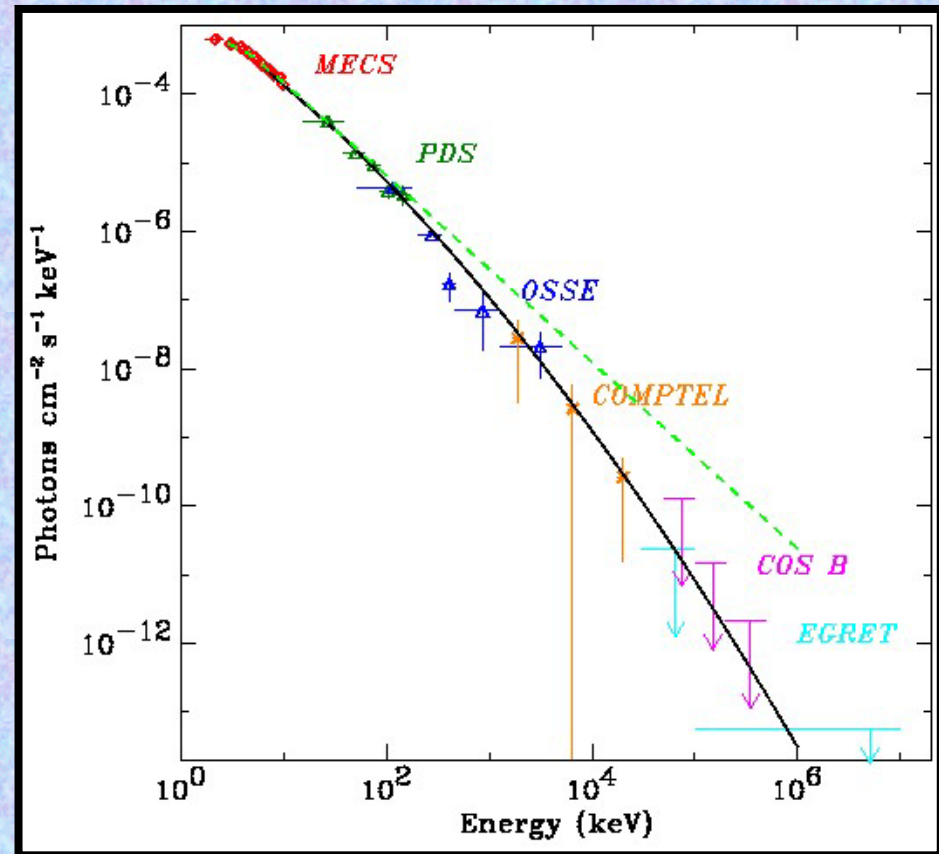
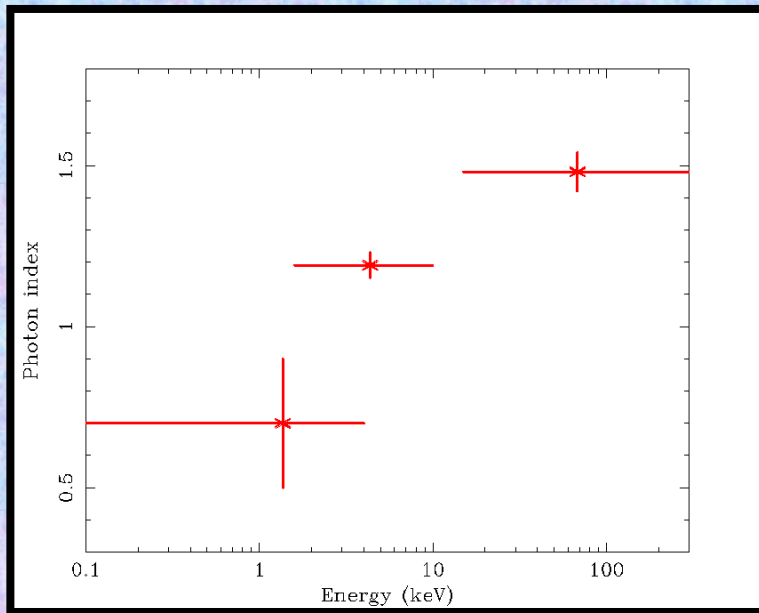
Crab Pulsar



Energy



PSR B1509-58



Cusumano et al. 2001

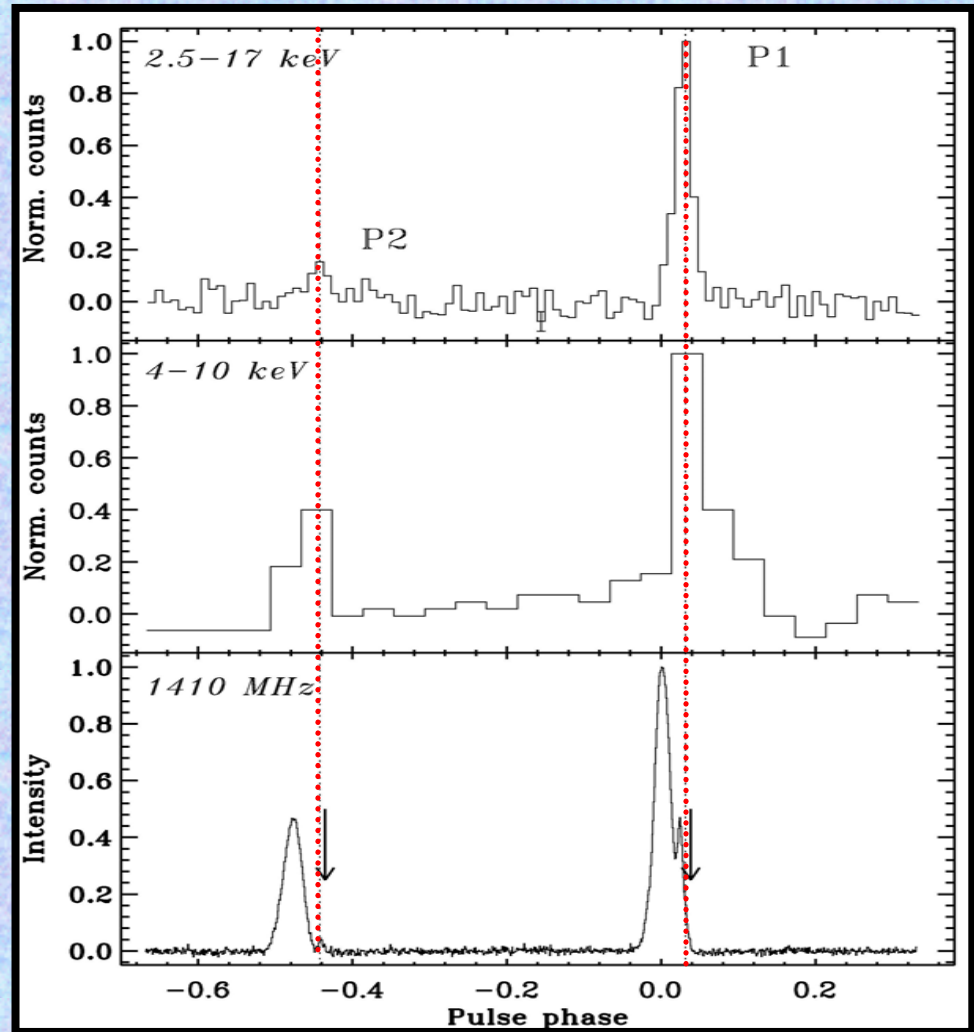
PSR B1937+21

P1

$$\Phi_X - \Phi_R = 44 \pm 1 \mu\text{s}$$

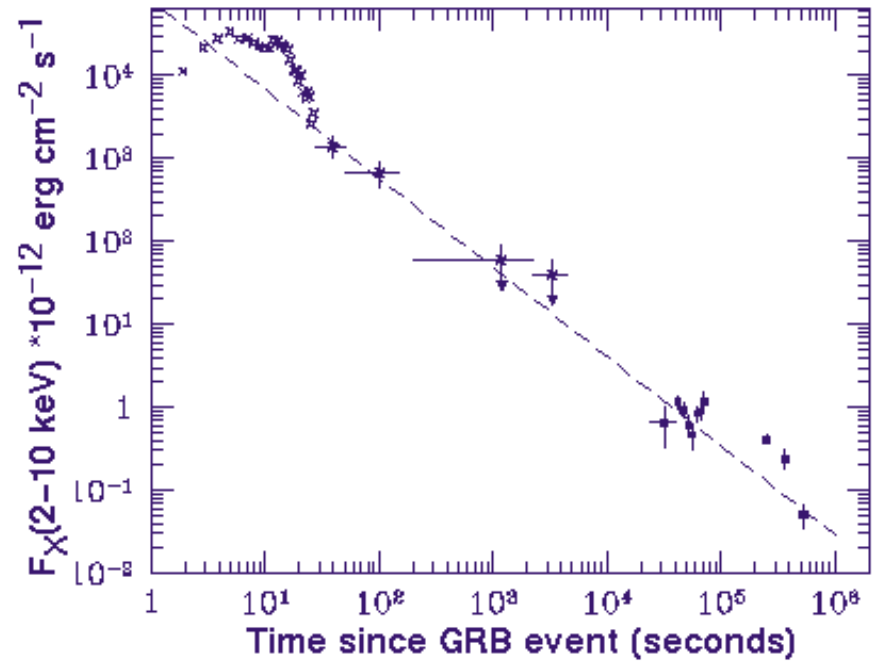
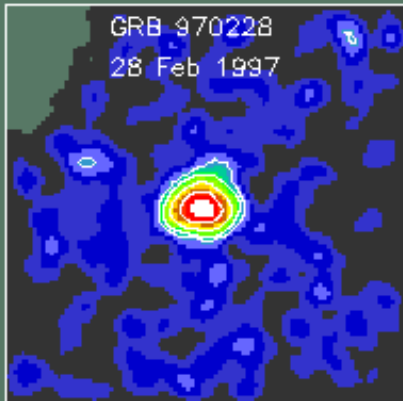
P2

$$\Phi_X - \Phi_R = 51 \pm 3 \mu\text{s}$$

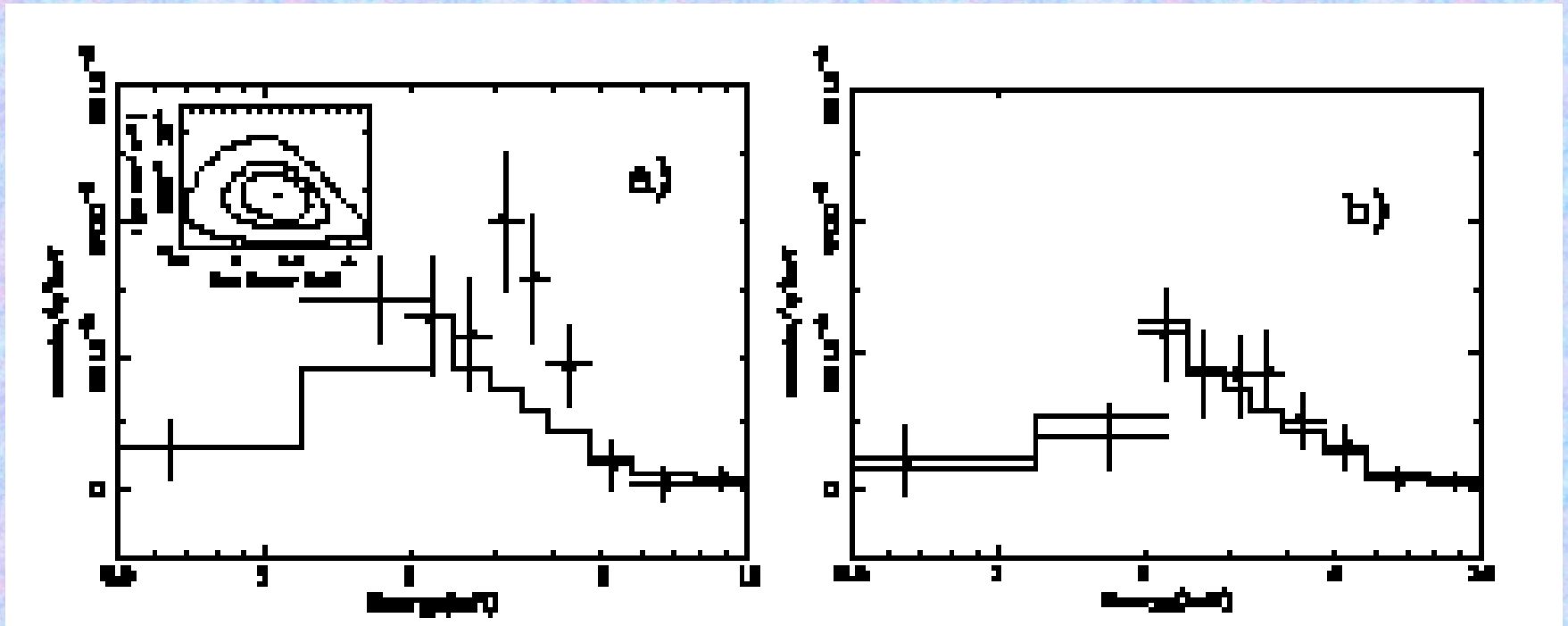


GRB 970228

GRB 970508



GRB 970508

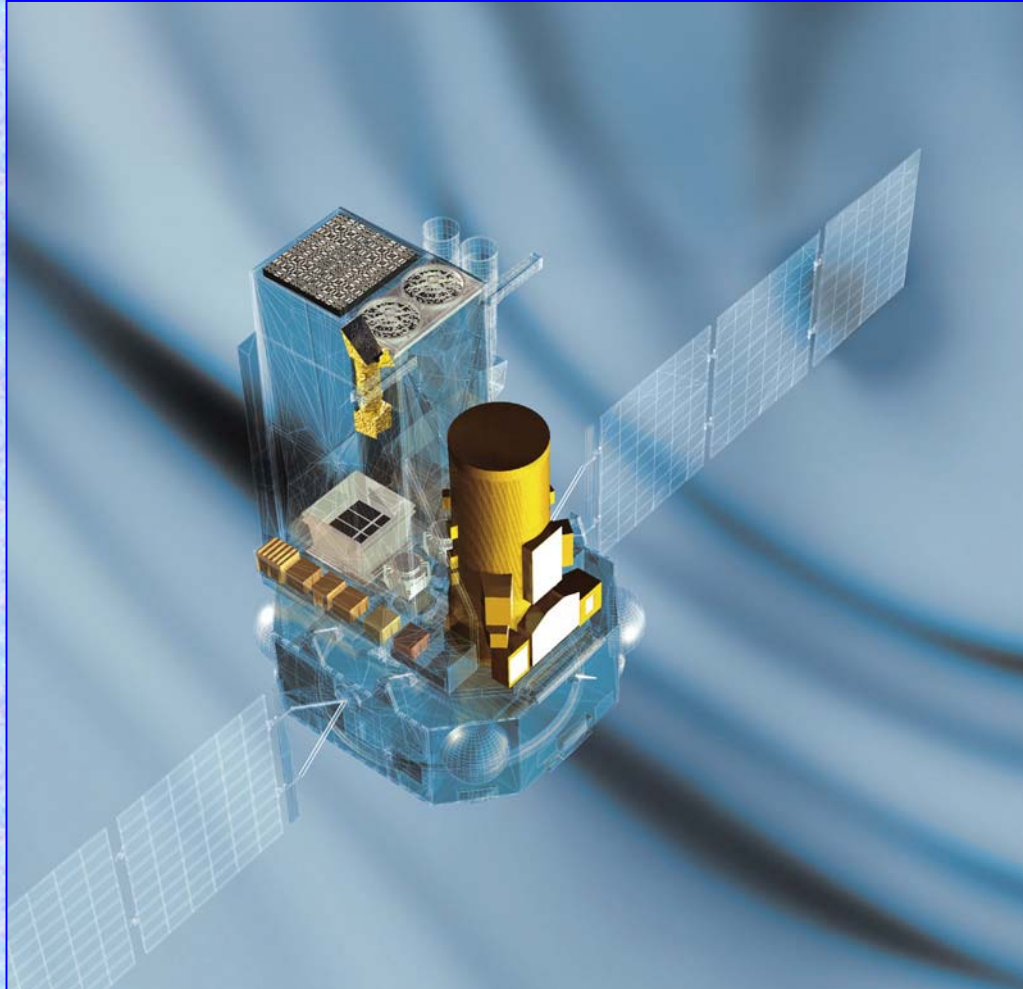


Piro et al 1999



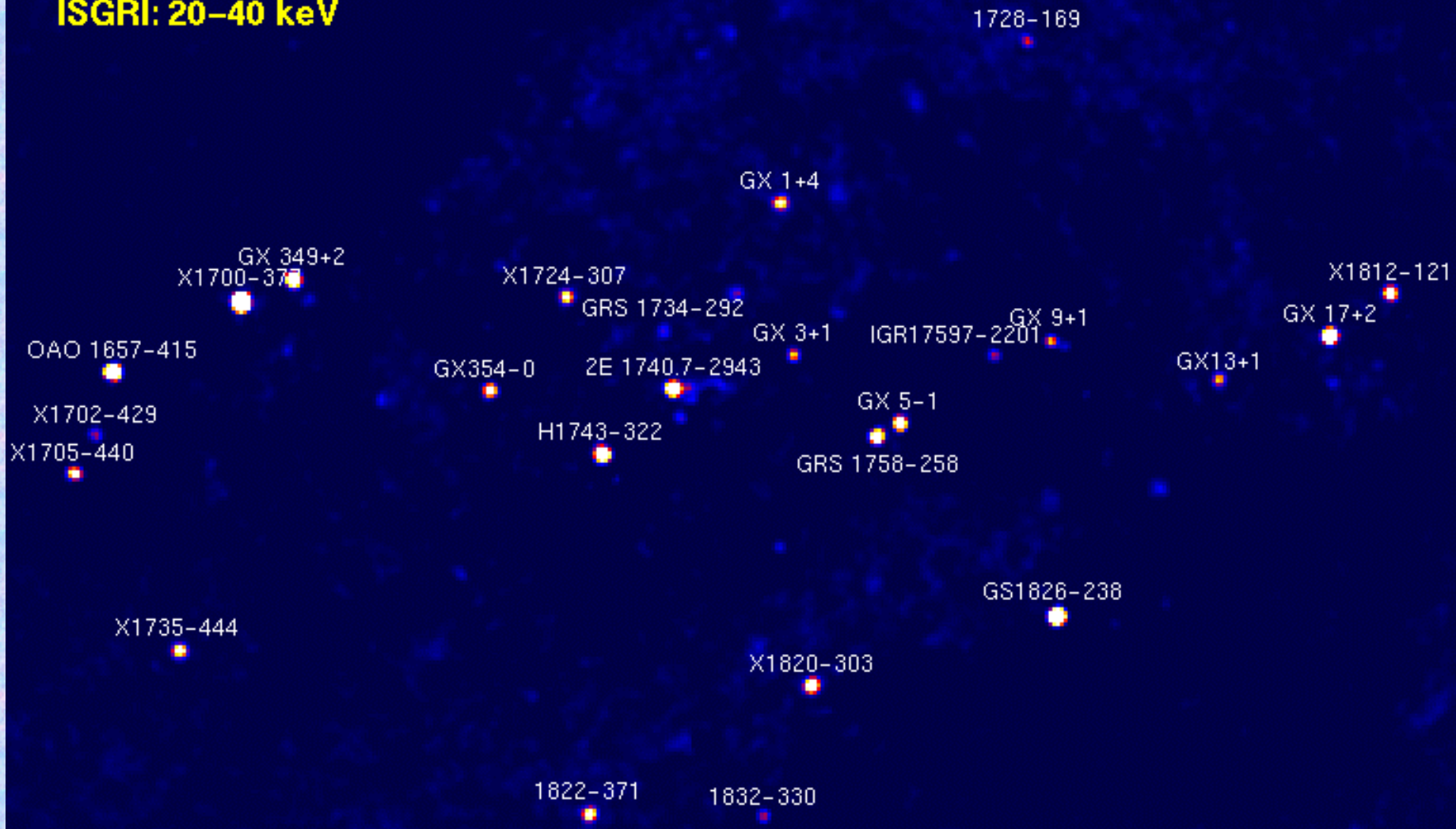
L'attività di analisi dati su BeppoSAX ha prodotto ad oggi circa 130 articoli su rivista di cui un terzo con primo nome in Istituto.

INTEGRAL

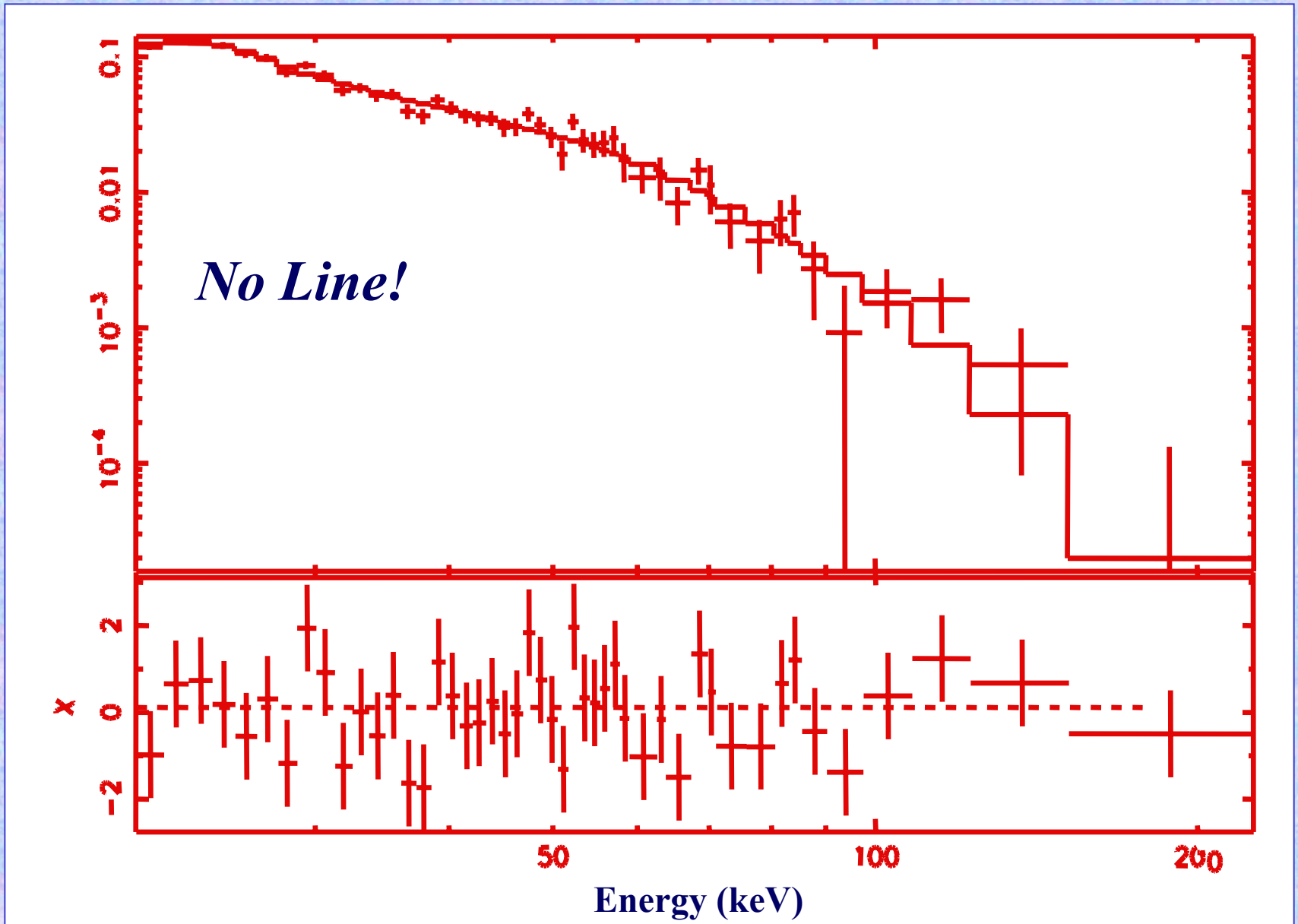


The 20-40 keV Galactic Center

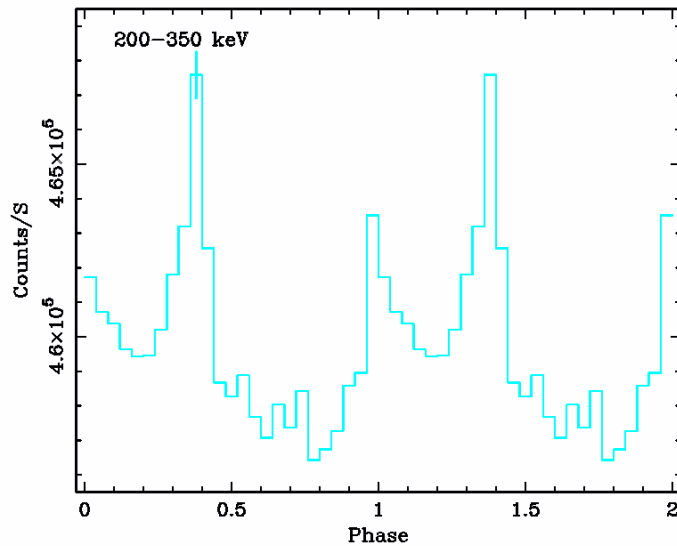
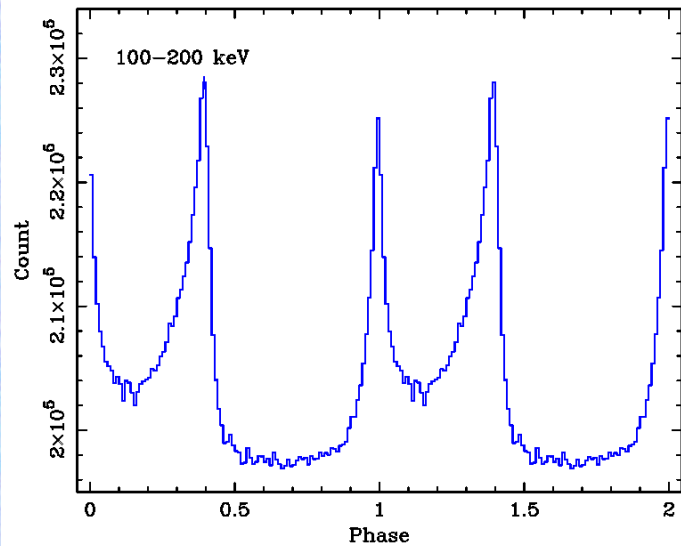
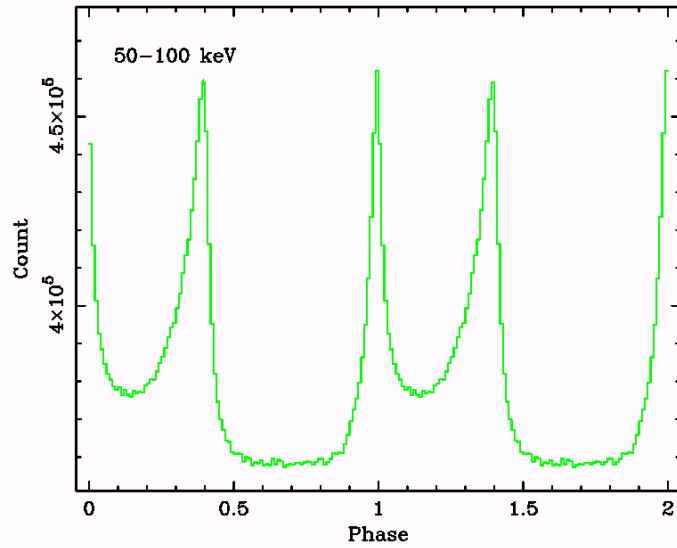
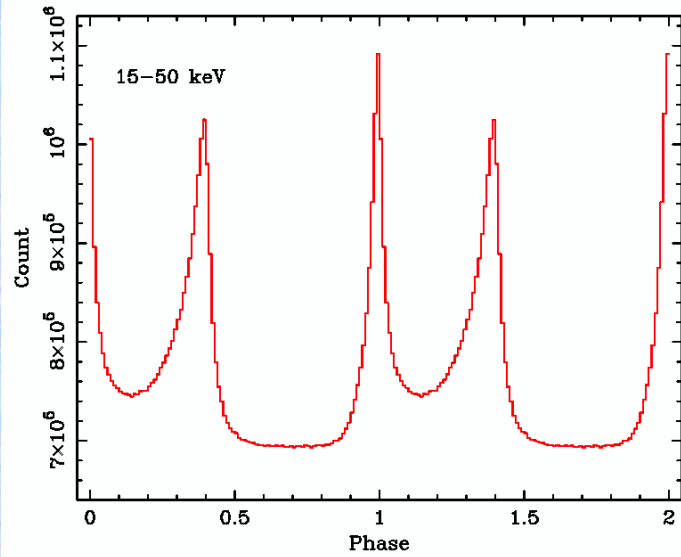
ISGRI: 20-40 keV



The ISGRI 20-200 keV Spectrum of GX1+4







The ISGRI 15-350 keV Crab Light Curves



Personale coinvolto

- 8 Ricercatori
- 3 Assegni di ricerca
- 3 Tecnici informatici

Dati utilizzati per l'analisi

-  Dati di osservazioni di RXTE ed XMM di proprietà dei componenti l'Istituto
-  Dati di osservazioni di Guest Observer con il satellite INTEGRAL
-  Dati di Core Program con il satellite INTEGRAL
-  Dati di archivio

Publicazioni



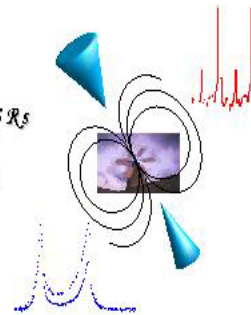
60 Pubblicazioni su rivista



80 pubblicazioni a congresso



*Pulsar AXPs & SGRs
observed
with BeppoSAX
and other
observatories*



September 23 - 25, 2002
"Saline di Trapani", Marsala (Italy)

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Finanziamenti disponibili al Marzo 2004

Contratto ASI	Progetto nazionale analisi dati BeppoSAX 14000€
Contratto ASI	Progetto nazionale analisi dati binarie X 1 Assegno di ricerca 32000€
Contratto ASI	Progetto nazionale analisi dati INTEGRAL 14000€
Contratto INAF	Progetto nazionale analisi dati pulsar isolate 11000€

Finanziamenti richiesti nel 2003

ASI Progetto nazionale analisi dati di archivio	48 000 €
ASI Progetto nazionale analisi dati di Core program INTEGRAL	40 000 €

+ PRIN 2004

Prospettive future

- INTEGRAL oltre che RXTE, Chandra ed XMM
- SWIFT che volerà nella seconda metà dell'anno