

Proposal for *Compton* GRO Guest Investigation

CGRO-98-021
Cover Form
NRA 98-OSS-01

PI Name DR. MARK L. MCCONNELL <small>Title First name Middle initial Last name</small>				Date 1998-05-03
PI Institution UNIVERSITY OF NEW HAMPSHIRE				
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E-mail address MARK.MCCONNELL@UNH.EDU				
Proposal Title CGRO OBSERVATIONS OF THE 2.2 MEV SOURCE CANDIDATE RE J0317-853				
Proposal Type <input checked="" type="checkbox"/> Type 1 Analysis of Archival Data <input checked="" type="checkbox"/> Type 3 Correlative Research <input checked="" type="checkbox"/> Type 2 Request for Observing Time <input type="checkbox"/> Type 4 Service Proposal				
Subject Category X RAY BINARIES				
Estimate of Total Project Cost \$ 18000				

Abstract: 1000 characters maximum(about 150 words).

We have previously generated the first all-sky map at 2.2 MeV using 5 years of data from CGRO/COMPTEL. Although generally featureless, the map does show one source (GRO J0332-87) at a significance level of ~ 4 sigma. One possible counterpart is RE J0317-853, a unique DA white dwarf star with both an unusually high temperature ($\sim 50,000$ K) and an unusually strong magnetic field (~ 340 MG). We speculate that the 2.2 MeV emission arises through some type of flaring process, although the exact mechanism remains unclear. For Cycle 7, we were awarded two weeks of observation time with both COMPTEL and OSSE that will take place in June, 1998. Meanwhile, we have been made aware of an unpublished observation of a 6 cm radio flare from RE J0317-853 that provides further evidence for episodic activity. We therefore propose to repeat the COMPTEL/OSSE observations of this region during cycle 8, regardless of the results from the cycle 7 observation.

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General Form

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Proposal Title CGRO OBSERVATIONS OF THE 2.2 MEV SOURCE CANDIDATE RE J0317-853
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Co-Investigators			
Last name	First name	Institution	Country
BARRETT	PAUL	GSFC	USA
RYAN	JAMES	UNH	USA
SCHOENFELDER	VOLKER	MPE	GERMANY
HERMSEN	WIM	SRON - UTRECHT	NETHERLANDS
BENNETT	KEVIN	SSD/ESA	NETHERLANDS

PI Institution UNIVERSITY OF NEW HAMPSHIRE
Administrative Authority (optional) ASSOCIATE DIRECTOR, UNH OFFICE OF SPONSORED RESEARCH
Administrator (optional) STEVEN BERNSTEIN
Signature: Date:

Statement as to the desired affiliation with Instrument Team or special access to proprietary data. PI IS A MEMBER OF THE COMPTTEL TEAM.

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Special Requirements Form

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Special Requirements: Please indicate additional required scheduling constraints, special operational modes, or other special requests for any of the relevant targets from the above list. When including scheduling constraints for correlative or targeted observations, please include the widest possible window to facilitate scheduling. Stricter constraints will decrease the likelihood of a candidate target being scheduled.

NONE