Cycle 1

Proposal for *SUZAKU* Observations

Cover Page

Principal Investigator

DR GRZEGORZ M MADEJSKI

Postal Address SLAC
STANFORD UNIVERSITY
2575 SAND HILL ROAD
MENLO PARK
CA USA 94025

Telephone (650) 926-5184 **Fax** (650) 926-4979
E-mail MADEJSKI@SLAC.STANFORD.EDU

Proposal Title

SUZAKU OBSERVATIONS OF GAMMA-RAY BRIGHT BLAZARS BL LACERTAE AND PKS 1510-089

Subject Category EXTRAGALACTIC COMPACT SOURCES

Number of Targets	Total Time	TOO Proposal?	Merging?
2	100.00	N	Y

Co-Investigator(s)

First Name	Last Name	Institute	Country
MAREK	SIKORA	COPERNICUS ASTRONOMICAL CENTER	POLAND
RAFAL	MODERSKI	COPERNICUS ASTRONOMICAL CENTER	POLAND
TADAYUKI	TAKAHASHI	INSTITUTE OF ASTRONAUTICAL SCIENCE	JAPAN

Co-I contact? N **E-mail**

Abstract

We propose two 50 ks Suzaku observations, one for each of gamma-ray bright blazars PKS 1510-089 and BL Lacertae, to be coordinated with optical and radio observations. The goal is to obtain broadband spectra and light-curves. The X-ray fluxes are known to be rapidly variable, but there is no information about the correlation between the spectral shape and flux, which is necessary to establish the origin of previously detected prominent soft X-ray excesses. They are crucial to discriminate between different radiation scenarios responsible for production of hard X-rays and gamma-rays, and to constrain the content and by extension, the acceleration process of the jet. These observations will be ingredients of a "pilot" campaigns for the future joint Suzaku-GLAST investigations.

Institute Endorsement

Name of Administrator

Administrative Authority

Institute

Signature: Date:

Proposal for *SUZAKU* Observations

Target Form

Cycle 1

Principal Investigator
DR GRZEGORZ M MADEJSKI
Proposal Title
SUZAKU OBSERVATIONS OF GAMMA-RAY BRIGHT BLAZARS BL LACERTAE AND PKS 1510-089

Target Summary

Tar No	Target Name	R.A.	Dec	Time (ksec)	Aim point	No obs	TC	XIS Mode Clock/W/B			Est. XIS CR FI/BI		Est. HXD CR PIN/GSO		Rem
1	PKS 1510-089	15 10 08.80	-08 54 47.8	50.00	XIS	1	N	NORM	N	N	3.000	3.000	5.000	5.000	Y
2	BL LACERTAE	22 02 43.20	+42 16 40.0	50.00	XIS	1	N	NORM	N	N	3.000	3.000	5.000	5.000	Y

Target Constraints

Tar No	Coordinated Observations Y/N	Start Time Year	Start Time Mo	Start Time Day	Start Time Hr	Start Time Min	Stop Time Year	Stop Time Mo	Stop Time Day	Stop Time Hr	Stop Time Min	Monitoring Obs Y/N	Intervals (ksec) Min	Intervals (ksec) Max	Phase Dependent Observations Y/N	Epoch MJD	Period (days)	Min Phase	Max Phase	Roll Depend Obs Y/N	Min Roll	Max Roll
1	N											N			N					N		
2	N											N			N					N		

Target Remarks

Tar No	Remarks
1	THIS IS NOT A TIME CRITICAL OBSERVATION, BUT TO FACILITATE COORDINATION WITH OTHER WAVEBANDS PLEASE DON'T CHANGE OBSERVATION START TIME ONCE SCHEDULED
2	THIS IS NOT A TIME CRITICAL OBSERVATION, BUT TO FACILITATE COORDINATION WITH OTHER WAVEBANDS PLEASE DON'T CHANGE OBSERVATION START TIME ONCE SCHEDULED