# **Titarchuk Lev**

Position: Professor of University of Ferrara
Research Professor of Naval Research
Laboratory (NRL), Goddard Space
Flight Center (GSFC), George Mason

University in USA

Period covered: from November 2007 to November 2008.



## **I Scientific Work**

Study of spectral and timing properties of Compact objects (black hole and neutron stars). Black hole mass determination using a new scaling method and X-ray observations by RXTE observatory.

### II Conferences and educational activities

## Conferences and Other External Scientific Work

Participation in a number of Conference:

- 1. High Energy Astrophysics meeting, Moscow, Russia, December 2007 (invited talk)
- 2. Observational Evidence of Black Hole meeting, Colkatta, India, February 2008 (invited talk)
- 3. American Astronomical Society meeting Los Angeles, March 2008 (NASA press release),
- 4. Milisecond Pulsar meeting, Amsterdam, Netherlands, April (invited talk)
- 5. Neutron Star Conference in Saint Petersburg, June 2008 2007 (invited talk)

# Work With Students:

Chiara Ceccobello-graduate student of University of Ferrara,

Andrey Makeev-graduate student of George Mason University

## Diploma thesis supervision:

Chiara Ceccobello-graduate student of University of Ferrara

Andrey Makeev-graduate student of George Mason University

## Other Teaching Duties:

Lectures on the course of High Energy Astrophysics in University of Ferrara

#### **Work With Postdocs**

Drs. Ruben Farinelli and Enrico Montari (University of Ferrara)

Dr. Elena Seyfina (Sternberg Astronomical Institute of Moscow University)

Dr. Nikolai Shaposhnikov (Goddard Space Flight Center)

Dr. Philippe Laurent (Saclay, Paris)

# **III Service activities**

#### Within ICRANet

Research, Adjunct Professor of ICRANET

## **IV Outside ICRANet**

Teaching and Research

### V 2007-2008 List of Publications

1 2007 L.Titarchuk, S. Kuznetsov & N. Shaposhnikov `` Correlations between X-ray spectral and timing characteristics in Cygnus X-2" ApJ, 667, 404

2 2008 L. Titarchuk & N. Shaposhnikov "On the Nature of the Variability Power Decay Towards Soft Spectral States in X-Ray Binaries: Case Study in Cyg X-1" (72717). ApJ, 678, 1230

3 2008 R. Farinelli, L. Titarchuk, A. Paizis, F. Frontera `` A new Comptonization model for low-magnetized accreting neutron stars in low mass X-ray binaries" ApJ, 680, 602

4 2008 E. Montanari, L.Titarchuk & F. Frontiera ``BeppoSAX Observations of the Power and Energy Spectral Evolution in the Black Hole Candidate XTE J1650-500'' ApJ, accepted