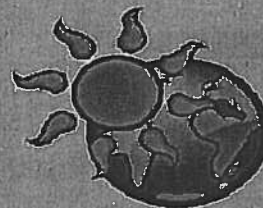


WEEKLY CALENDAR

Physics & Astronomy

202 Nicholson Hall



Baton Rouge, LA 70803-4001

<http://www.phys.lsu.edu>

Louisiana State University

March 7, 2005

Tel: (225) 578-2261

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General Seminar

"Frustrated spins on a metallic pyrochlore"

Dr. Satoru Nakasutji

Kyoto University

Tuesday, March 8, 2005 at 3:40 PM in Room 109 Nicholson Hall

Host: Dr. John DiTusa

(Refreshments served at 3:15 p.m. in Room 229 Nicholson)

General Seminar

"Mapping Accretion in Ultra-compact Binary Stars"

Dr. Danny Steeghs

Harvard-Smithsonian Center for Astrophysics

Thursday, March 10, 2005 at 3:40 PM in Room 109 Nicholson Hall

Host: Dr. Robert Hynes

(Refreshments served at 3:15 p.m. in Room 229 Nicholson)

ABSTRACT

Recent surveys have unveiled a large population of several hundred million double white dwarf binaries in our galaxy. I discuss the possible outcomes of such systems as they evolve to shorter and shorter orbital periods, and focus on the sub-set of double degenerate binaries that undergo mass transfer. The accretion geometry is crucial in determining the evolution of such objects. I present recent observations of the known accreting ultra-compact systems with orbital periods as short as 5 minutes. Doppler mapping allows us to establish their accretion geometry and derive fundamental binary parameters. Such observations are crucial in determining the contribution of these binaries to the galactic populations of UV, X-ray and gravitational wave sources.

Welcome To:

Dr. Hwang Lee, Assistant Professor. He is located in Room 451, 578-2365.

Dr. Joseph Dugas, a Postdoctoral Researcher with Professor Kenneth Hogstrom. He is located in Room 459-A, 578-4289.



PUBLICATIONS



"High-Pressure Synthesis, Crystal Structure Determination, and a Ca Substitution Study of the Metallic Rhodium Oxide NaRh_2O_4 ," Kazunari Yamaura, Qingzhen Huang, **Monica Moldovan**, **David P. Young**, Akira Sato, Yuji Baba, Takuro Nagai, Yoshio Matsui, and Eiji Takayama-Muromachi, *Chem. Mater.* 2005, 17, 359-365.

"No Black Hole Information Puzzle in a Relational Universe," Rodolfo Gambini, Rafael A. Porto, and **Jorge Pullin**, *International Journal of Modern Physics D*, Vol 13, No. 10 (2004) 2315-2320.

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