

MONDAY 3 February, 2014

Notice: All presentations are 30' slots including time for questions

09:00-09:20 Registration in ISSI Hallerstrasse 6, 1st floor

09:20-09:30 Welcome and Introducing to ISSI and Workshops M. Falanga

Session 1 Introduction

Chairman: Maurizio Falanga

09:30-09:45 The fifth volume of the Trilogy André Balogh

09:45-10:30 Physics in very strong magnetic fields Dong Lai

10:30-11:00 *Coffee break*

Session 2 Magnetic Stars

Chairman: Boris Gaensicke

11:00-11:30 Strong magnetic fields in stars: observations Jeff Linsky

11:30-12:00 Generation of B fields in stars (young stars, T Tauri, etc.) Markus Schoeller

12:00-12:30 The wind-fed magnetospheres of massive-stars Stan Owocki

12:30-13:00 Final stages of evolution and formation of magnetized compact objects Alicia Soderberg

13:00-14:30 *Lunch*

14:30-15:00 Discussion

Session 3 White Dwarfs

Chairman: Jeff Linsky

15:00-15:30 Observations of B fields in interacting WD Domitilla De Martino

15:30-16:00 Magnetic fields of isolated WD (observ. + theory) Boris Gaensicke

16:00-16:30 Origin and evolution of B fields Lilia Ferrario

16:30-17:00 Discussion

17:00 *Welcome reception*

TUESDAY 4 February, 2014

Session 4 *Neutron Stars***Chairman:** Vasily Beskin

9:00-9:30	Observations of rotation powered NS (global properties connected with B and its evolution)	Carl Gwinn
9:30-10:00	Isolated NS (XDINS, magnetars, CCO, etc)	Andrea de Luca
10:00-10:30	X-ray binaries (B fields in HMXB, evidence for low B fields in LMXB)	Mike Revnivtsev

10:30-11:00 *Coffee break***Chairman:** Alicia Soderberg

11:00-11:30	Origin of neutron star magnetic fields (compression /dynamo)	Andrew Melatos
11:30-12:00	Thermal emission from isolated NS	Alexander Potekhin
12:00-12:30	Physics / micro physics of NS interior and crust	Dany Page

12:30-14:00 *Lunch***Chairman:** Stan Owocki

14:00-14:30	Magnetospheres in accreting objects	Marina Romanova
14:30-15:00	Magnetospheres in isolated NS	Alexander Tchekhovskoy
15:00-15:30	Discussion	

15:30-16:00 *Coffee break***Session 5 *Pulsar Wind Nebulae*****Chairman:** Sandro Mereghetti

16:00-16:30	Observations of PWN (multiwavel. morphology)	Oleg Kargaltsev
16:30-17:00	Observations of PWN (high-E emission)	Edoardo Striani
17:00-17:30	Jets and outflows from NS (includes simulations)	Yuri Lyubarsky
17:30-18:00	Discussion	

WEDNESDAY 5 February, 2014

Session 6 *Magnetars*

Chairman: Carl Gwinn

09:00-09:30	Observations (includes persistent, transients and short bursts)	Sandro Mereghetti
09:30-10:00	Observations of giant flares (includes radiative processes, QPOs)	Gianluca Israel
10:00-10:30	Dynamics of B fields in the crust	Jose Pons
10:30-11:00	<i>Coffee break</i>	
		Chairman: Marina Romanova
11:00-11:30	Effect of crust dynamics on magnetosphere	Dany Page
11:30-12:00	Magneto-thermal evolution and relations to other NSs	Jose Pons
12:00-12:30	Discussion	
12:30-14:00	<i>Lunch</i>	
14:00-19:00	Free time to visit the attractions of Bern Also: All ISSI facilities are available for small group discussions	
19:00	Workshop dinner at the CASINO restaurant, Bern	

THURSDAY 6 February, 2014

Session 7 AGNs /GRBs**Chairman:** Tsvi Piran

09:00-09:30 Evidence for role of B in outflows and jets from AGNs Martin Hardcastle

09:30-10:00 Properties of GRBs Judy Racusin

10:00-10:30 Observational constraints on GRB jet composition Frédéric Daigne

10:30-11:00 *Coffee break***Chairman:** Martin Hardcastle

11:00-11:30 General relativity effects (mainly simulations) Alexander Tchekhovskoy

11:30-12:00 Magnetic energy production by relativistic turbulent dynamo Jonathan Zrake

12:00-13:30 *Lunch***Chairman:** Judy Racusin

13:30-14:00 B field in short GRBs Luciano Rezzolla

14:00-14:30 Discussion

Session 8 Jet Acceleration / Collimation**Chairman:** A. Tchekhovskoy

14:30-15:00 MHD jet simulations: from accretion-ejection and collimation to synchrotron emission Christian Fendt

15:00-15:30 Jet acceleration/collimation/stability Jonathan Granot

15:30-16:00 *Coffee break***Chairman:** Lilia Ferrario

16:00-16:30 Accretion (MRI and B fields generation) John Hawley

17:00-17:30 Discussion

FRIDAY 7 February, 2014

Session 9 Reconnection / Particle Acceleration

Chairman: Yuri Lyubarsky

09:00-09:30 Magnetic reconnection in relativistic jets

Dimitrios Giannios

09:30-10:00 Relativistic shocks accelerations simulations

Lorenzo Sironi

10:00-10:30 Relativistic shocks and particle acceleration

Uri Keshet

10:30-11:00 Coffee break

Chairman: Rudolf Treumann

11:00-11:30 Particle acceleration in PWN (relativistic reconnection)

Benoit Cerutti

11:30-12:00 Discussion

Session 10 ISSI Book

Chairman: M. Falanga/A.Balogh

12:00-13:00 Discussion book (authors Book plans, actions, schedule)

End of Workshop