

Wednesday, June 6th

09:00 Bus pick-up in front of Hotel EXE Moncloa (Madrid)

Chair: Felix Fuerst

10:00 – 10:45 **Tim Roberts** *Review of Observational Facts*

10:45 – 11:00 **Frank Haberl** *The new ULX pulsar in NGC 300 and its fast period evolution*

11:00 – 11:15 **Murray Brightman** *Discovery of a CRSF in a ULX*

11:15 – 11:30 **Gianluca Israel** *Taking the beat of the UNSeEN: a new Ultraluminous Neutron Star Extragalactic population*

11:30 – 12:00 Coffee Break

Chair: Matt Middleton

12:00 – 12:25 **Matteo Bachetti** *The timing properties of Ultraluminous pulsars*

12:25 – 12:50 **Fabio Pintore** *Searching for more Ultraluminous X-ray pulsars in the ULX*

12:50 – 13:05 **Andrea Belfiore** *The Neutron Star that Shined too Much*

13:05 – 13:20 **Filippos Koliopanos** *ULX spectra revisited: Accreting, highly magnetized neutron stars as the engines of ultraluminous X-ray sources*

13:20 – 13:30 *Poster presentations*

13:30 – 15:00 Lunch

Chair: Sergey Tsygankov

15:00 – 15:25 **Marianne Heida** *Overview of optical and infrared counterparts of ULXs/ULPs*

15:25 – 15:50 **Christian Motch** *Optical observations of ultra-luminous X-ray pulsars*

15:50 – 16:05 **Jakob van den Eijnden** *Discovery of a relativistic jet in a super-Eddington X-ray pulsar*

16:05 – 16:20 **Natalie Webb** *Do pulsating ULXs show radio pulsations during their low states?*

16:30 – 17:00 Coffee Break

Chair: Luca Zampieri (TBC)

17:00 – 17:15 **Ciro Pinto** *Relativistic outflows from archetypical ULXs*

17:15 – 17:30 **Peter Kosec** *Evidence for a Variable Ultrafast Outflow in the Ultraluminous Pulsar NGC 300 ULX-1*

17:30 – 17:45 **Dom Walton** *A Potential Cyclotron Feature in the ULX pulsar NGC 300 ULX1*

17:45 – 18:00 **Andy Fabian** *Super-critical Propellers in Pulsing ULX Sources.*

18:00 – 18:15 **Ryan Lau** *A Mid-Infrared Time-Domain Investigation of Ultraluminous X-ray Sources with the Spitzer Space Telescope*

18:30 Bus back to Madrid (Hotel EXE)

Thursday, June 7th

09:00		Bus pick-up in front of Hotel EXE Moncloa (Madrid)
	<i>Chair:</i> Dom Walton	
10:00 – 10:45	Selma de Mink	<i>Review of Stellar Evolution</i>
10:45 – 11:00	McKinley Brumback	<i>Pulse dropout in LMC X-4: Bridging the gap between magnetic properties in Eddington and super-Eddington pulsars</i>
11:00 – 11:15	Hannah Earnshaw	<i>Discovering new PULX candidates by searching for transient ULXs</i>
11:15 – 11:30	Elena Ambrosi	<i>Unveiling Pulsar ULXs from optical data</i>
11:30 – 12:00		Coffee Break
	<i>Chair:</i> Marianne Heida	
12:00 – 12:25	Tassos Fragos	<i>Binary evolution towards ultra-luminous X-ray pulsars</i>
12:25 – 12:50	Thomas Tauris	<i>Formation of ultra-luminous X-ray pulsars and comparison to millisecond pulsars</i>
12:50 – 13:15	Grzegorz Wiktorowicz	<i>Compact object population in ULXs</i>
13:20 – 13:30		<i>Poster presentations</i>
13:30 – 15:00		Lunch
	<i>Chair:</i> GianLuca Israel	
15:00 – 15:25	Kyle Parfrey	<i>Simulations of magnetospheres and accretion disks</i>
15:25 – 15:50	Nanda Rea	<i>Magnetars in different flavours</i>
16:00 – 16:30		Discussions / Working group time
16:30 – 17:00		Coffee Break
17:00 – 18:00		Working group time
18:00 – 18:30		Report of working group results to full auditorium
18:30		Bus back to Madrid (Hotel EXE)

Friday, June 8th

09:00		Bus pick-up in front of Hotel EXE Moncloa (Madrid)
	<i>Chair:</i> Ken Oshuga	
10:00 – 10:45	Jean-Pierre Lasota	<i>Review of accretion in low B-field neutron stars</i>
10:45 – 11:30	Juri Poutanen	<i>Review of accretion onto highly-magnetized neutron stars</i>
11:30 – 12:00		Coffee Break
	<i>Chair:</i> Matteo Bachetti	
12:00 – 12:25	Alexander Mushtukov	<i>Accretion geometry of ultra-luminous X-ray pulsars</i>
12:25 – 12:50	Ken Oshuga	<i>Super-Eddington Flows and X-ray spectra</i>
12:50 – 13:05	David Abarca	<i>MHD simulations of matter flow on magnetized and non-magnetized neutron stars</i>
13:05 – 13:20	Tomohisa Kawashima	<i>Radiation hydrodynamic simulations of super-critical accretion columns onto neutron stars</i>
13:20 – 13:30		<i>Poster presentations</i>
13:30 – 15:00		Lunch
15:00 – 16:30		Working group time
16:30 – 17:00		Coffee Break
17:00 – 18:00		Working group time
18:00 – 18:30		Report of working group results to full auditorium
18:30		Bus back to Madrid (Hotel EXE)

Discussion sessions

Session 1 (Thursday afternoon)

Population synthesis and evolution

Chair: Philipp Podsiadlowski

How can we get to the current ULX population? How long can a ULX pulsar survive? How are they formed?

Session 2 (Friday afternoon)

Interface between theory and observations

Chair: Sergey Tsygankov

Discuss what kind of input observers would like from the theorists and vice versa. What kind of observations are necessary to test certain aspects of the models?

Session 3 (Friday evening)

Identify new observations

Chair: Natalie Webb

This should be in preparation for the next round of proposals and include X-rays as well as multi-wavelength proposal ideas