Observations & theory in the dynamics of neutron stars

Talks are 30+10 mins (invited) or 15+5 mins (PhDs)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
9:00		**REGISTRATION**				
9:20		*Ab initio many-body theory* Chair: Horowitz Aurel Bulgac *QMC of neutron matter and related systems*	*Energy density functionals* Chair: Holt P.-G. Reinhard *Stars and Skyrme forces*	*Nuclear pastas & crust* Chair: Link Chuck Horowitz *Nuclear pastas*	*QPOs/Magnetars* Chair: Andersson Bennett Link *Torsional oscillations of a magnetar with a tangled magnetic field*	*Neutron star dynamics* Chair: Glampedakis Evgeni Kolomeitsev *Viscosity of NS matter and mechanism of r-mode stability in young rapidly rotating pulsars*
10:00		Arianna Carbone *Green's function approach to nuclear and neutron matter with chiral forces*	Anthea Fantina *EoSs of dense matter: nuclear-matter properties and neutron-star structure*	Dmitry Kobyakov *Effective shear modulus of the crust of neutron stars and white dwarfs*	Michael Gabler *QPOs in SGR giant flares: first steps towards neutron star seismology*	Riccardo Ciolfi *The 'time-reversal' scenario for short γ-ray bursts and its constraints on NS properties*
10:40		**COFFEE**	**COFFEE**	**COFFEE**	**COFFEE**	**COFFEE**
11:00		Kai Hebeler *Neutron-rich matter from chiral EFT interactions*	Michael Forbes *Real-time methods for superfluid hydrodynamics*	Chris Pethick *Induced interactions in neutron star crusts*	Samuel Lander *Magnetically-driven neutron-star crustquakes*	Wolfgang Kastaun *Structure and dynamics of HMNS created in BNS mergers*
11:40		Christian Drischler *Towards full N3LO calculations of asymmetric nuclear matter* --- Corbinian Wellenhofer *Thermodynamics of the symmetry energy and the EoS of asymmetric nuclear matter*	Informal discussion	Matt Caplan *Nuclear pasta: new structures and nucleosynthesis* --- Roshan Sellahewa *Isovector & pairing properties of the Gogny interaction*	Vanessa Graber *Magnetic field evolution in superconducting neutron stars* --- Konstantinos Palapanidis *Numerical equilibria of superconducting neutron stars with entrainment*	Open discussions *Future Directions, Needs and Synergies*
12:20		**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH & END**
14:00		*Neutron star dynamics* Chair: Kolomeitsev Térence Delsate *Dynamical tidal interactions in compact objects*	*Pulsar glitches* Chair: Chamel Ali Alpar *Modelling pulsar glitches & post-glitch response*	*ECT* colloquium talk* **Nils Andersson** *Neutron stars as fundamental physics laboratories*	COST NewCompstar Discussion Session *Topic 1*	
14:40		Jan Steinhoff *Effective theory for neutron star multipoles and universal relations*	Anthony van Eysden *Spin-up of ideal superfluids and plasmas and observational consequences in neutron stars*		COST NewCompstar Discussion Session *Topic 2*	
15:20		**COFFEE**	**COFFEE**	**COFFEE**	**COFFEE**	
15:40		*Ab initio methods* Chair: Bulgac Arnau Rios *Neutron matter pairing beyond BCS*	Kostas Glampedakis *Persistent crust-core spin lag in neutron stars*	Small group brainstorming session	COST NewCompstar Discussion Session *Topic 3*	
16:20		Hugo Arellano *Role of di-nucleon bound states in BHF s-p spectra at subsaturation densities*	Stefano Seveso *Advances in models of pulsar glitches* --- Danai Antonopoulou *Post-glitch recoveries as probes into NS superfluidity*	*Challenges & priorities in the description of neutron star dynamics*	COST NewCompstar Discussion Session *Topic 4*	
17:00		**END**	**END**	**END**	**END**	
20:00	Pizzeria La Mostra	Buffet dinner @ ECT*	La Baracca	TBA	TBA	Pizzeria La Mostra