Day 1: Crust constraints from heated neutron stars

Registration 8:30-9:30

Morning session 1, 9:30 - 11.00
Welcome address -- Nathalie Degenaar (10 min)
Crust cooling of accretion-heated NSs in LMXBs -- Aastha Parikh
(invited, 30 min)
Crust cooling of accretion-heated NSs in HMXBs -- Alicia Rouco Escorial (invited, 30 min)
Thermal emission from the full neutron star surface in a quiescent HMXB -- Craig Heinke (contributed, 20 min)

Coffee break 11:00 - 11:30

Morning session 2, 11:30 - 13:00
Simulations of accretion-heated neutron stars -- Laura Ootes
(invited, 30 min)
Theoretical implications of thermal emission from quiescent NSs -- Sophia Han (invited, 30 min)
Contamination of low-level accretion in quiescence -- Montserrat Armas Padilla (invited, 30 min)

Lunch break 13:00 - 14:00

Afternoon session 1, 14:00 - 14:50
Diffuse nuclear burning in cooling neutron stars -- Marcella Wijngaarden (invited, 30 min)
The physics of shallow heating —-- Andrew Cumming (contributed, 20 min)

Coffee break 14:50 - 15:30

Afternoon session 2, 15:30 - 17:00
Moderated discussion (TBD; shallow heating) -- Dany Page, Dima Yakovlev, Craig Heinke

Welcome reception, 17:00 - 19:00 (Cafe/restaurant Polder)
**Day 2: Nuclear reactions**

**Morning session 1, 9:30 - 11.10**
- Theory of nuclear surface burning -- Yuri Cavechhi (invited, 30 min)
- Observations of X-ray bursts -- Duncan Galloway (invited, 30 min)
- Observations of long bursts -- Khaled Alizai (contributed, 20 min)
- New models for Type I X-Ray Bursts and their ashes -- Alexander Heger (contributed, 20 min)

**Coffee break 11:10 - 11:40**

**Morning session 2, 11:40 - 13:10**
- Crustal modes and X-ray bursts -- Frank Chambers (invited, 30 min)
- Crust reactions and EOS -- Anthea Fantina (invited, 30 min)
- Light and heavy clusters in warm stellar matter -- Helena Pais (contributed, 20 min)
- Accreted versus catalyzed crust: neutron star parameters -- Leszek Zdunik (contributed, 20 min)

**Lunch break 13:10 - 14:10**

**Afternoon session 1, 14:10 - 15:00**
- Crust reactions in connection with lab experiments -- Zach Meisel (invited, 30 min)
- Neutron transfer reactions and detailed balance for fusion reactions in the thermo-pycnonuclear regime -- Andrey Chugunov (contributed, 20 min)

**Coffee break 15:00 - 15:30**

**Afternoon session 2, 15:30 - 17:00**
- Moderated discussion (topic TBD) -- Andrew Cumming & Edward Brown & Alexander Heger

**Conference dinner, 18:30 - 23:00 (Poesiat & Kater)**
Day 3: Crust physics and magnetic fields

Morning 1, 9:30 - 10:50
Crust physics -- Nicolas Chamel (invited, 30 min)
Neutron star crusts as viewed from nuclear experiments -- Hendrik Schatz (invited, 30 min)
Pairing, entrainment, and phonons in the inner crust -- Michael Urban (contributed, 20 min)

Coffee break 10:50 - 11:20

Morning 2, 11:20 - 13:00
Nuclear pasta, simulations -- Matt Caplan (invited, 30 min)
The abundance and disorder of nuclear pasta in neutron star crusts -- William Newton (contributed, 20 min)
Crust superfluidity -- Vanessa Graber (invited, 30 min)
Pulsar glitches and NICER monitoring of PSR J0537-6910 -- Wynn Ho (contributed, 20 min)

Lunch break 13:00 - 14:00

Afternoon 1, 14:00 - 15:20
Magneto-thermal evolution of neutron stars -- Daniele Vigano (invited, 30 min)
Crust cooling of magnetars -- Francesco Coti Zelati (invited, 30 min)
Maximal cooling of neutron star crusts —- Andrew Cumming (contributed, 20 min)

Coffee break 15:20 - 15:50

Afternoon 2, 15:50 - 17:00
Moderated discussion on open questions in NS crust research -- Helena Pais, Wynn Ho

Meeting adjourn, 17:00