

INT Program INT-11-2b

Week 4: Microphysical inputs (equation of state, rates, opacities) to macroscopic models

Schedule

Notes: We have changed the format somewhat. Anyone who would like to give a talk may speak for up to about 45 minutes. Shorter is fine too; the idea is to stimulate as much discussion as possible.

If you are giving a longer talk, please remember to prepare a 15-minute introduction for non-experts.

Monday, August 1

10:30 am, Room C421

Andrew Steiner, "Determining the Equation of State of Dense Matter from Neutron Star Mass and Radius Determinations"

3:00 pm, Room A114

Joe Carlson, "Homogeneous and Inhomogeneous Neutron Matter"

3:30 pm, Room A114

Kai Hebeler, "Chiral three-body forces and neutron- rich matter"

4:00 pm, Room A114

Hans-Josef Schulze, "The Maximum Mass Problem"

Tuesday, August 2

10:30 am, Room C421

Ray Sawyer, "Plasma Corrections to Rates: A More Serious Issue Than it May Seem"

11:30 am, Room C421

Armen Sedrakian, "Color Superconducting Compact Stars: Structure, Cooling and Gravitational Radiation"

3:00 pm, Room A114

Madappa Prakash, Discussion

3:30 pm, Room A114

Andrew Steiner, Discussion

Wednesday, August 3

10:30 am, Room C421

Vincenzo Cirigliano, "A Low-Energy Effective Theory of the Neutron Star Crust"

11:30 am, Room C421

Joseph Hughto, "Structure and Shear Modulus of the Neutron Star Crust"

3:00 pm, Room A114

André da Silva, "Molecular Dynamics Simulations of the Neutron Star Crust: Freezing and Chemical Separation"

3:30 pm, Room A114

Rishi Sharma, "Electron Screening and Damping in Magnetar Crusts"

Thursday, August 4

10:30 am, Room C421

Fiorella Burgio, "Oscillation Frequencies of Hot and Young Neutron Star"

3:00 pm, Room A114

Evan O'Connor, "The Role of Collective Neutrino Flavor Oscillations in Core-Collapse Supernova Shock Revival"

Friday, August 5

No talks