M. Kramer, Max-Planck-Institute of Radioastronomy (MPIfR), Bonn:
"Neutron star studies in the Future: The prospects of the SKA"

abstract*: "Most of the neutron stars known today have been discovered as radio pulsars. Their observations yield a wealth of information, including insight in their Galactic population, their internal structure, their masses, their magnetic fields and many more. They are therefore not only useful as clocks for experiments in gravitational physics but also tell us about their formation and their equation of state. The field will undergo an incredible revolution once the SKA comes online.*
This talk will highlight some of the exciting science results that we can expect for neutron stars."

K. Kokkotas, Eberhard Karls University, Tübingen:
" Magnetars and Giant Flares: what can we say about their equation of state and the emission of gravitational waves"

abstract: *"The giant flares in magnetars and the quasi periodic oscillations (QPOs) that follow them, provide a tool for resolving issues related to the generation of the extra strong magnetic fields, their evolution and dynamics. The observed QPOs can be linked with crust vibrations but also with major rearrangements and oscillations in the interior of the magnetar. The simulation of such processes can lead to constraints in the parameters of the magnetar (mass, radius, equation of state, crust thickness and strength of the magnetic field) and provides the possibility of testing the possibility of gravitational wave emission."*

J. Schaffner-Bielich, Ruprecht Karls University, Heidelberg:
"Constraints on the Nuclear and Quark Matter Equation of State for Neutron Stars"

abstract: *"The recent observation of the pulsar PSR J1614-2230 with a mass of 1.97 ± 0.04 M_o gives a strong constraint on the quark and nuclear matter equations of state (EoS). We explore the parameter ranges for a parameterized EoS for neutron star matter and quark matter and confront it with terrestrial laboratory data and with astrophysical data. The future role of astrophysical observations for constraining the equation of state of dense matter is outlined."*

A. Schwope, Leibnitz Institute of Astrophysics (AIP), Potsdam:
"XDINS and eROSITA surveys"

abstract: *"ROSAT has uncovered the long-sought population of isolated neutron stars which is though to be powered mainly by cooling, the X-ray Dim Isolated Neutron Stars (XDINS). XMM-Newton, despite being much more sensitive, could add only one object due to the small sky area surveyed so far. eROSITA holds the promise to discover a significant number of XDINS thus enabling population studies on meaningful samples for the first time.*
We will review the currently known population properties, describe the eROSITA mission and its capabilities for neutron star studies and will present preliminary results of a population synthesis model that allows a quantitative eROSITA forecast."