



The first announcement for

**International Symposium on Neutron Star Matter (NSMAT2016)
—Recent Progress in Observations, Experiments and Theories—**

November 21 (Mon) – 24 (Thu), 2016

Graduate School of Science, Tohoku University, Sendai, Japan

Matter in neutron stars has attracted great interest from various fields in science. Our understanding of the nuclear matter in neutron stars and their inner structure has been developed through recent astronomical observations on neutron star mass and radius, various new experimental data for neutron-rich nuclei and hypernuclei obtained at RIKEN, J-PARC and other laboratories, thermodynamic properties of ultra-cold atoms, as well as theoretical studies to combine those results. The symposium is intended to exchange information on those recent results and to discuss future directions of the study on neutron star matter.

The symposium is organized by the project team of the Grant-In-Aid for Scientific Research on Innovative Areas titled “Nuclear Matter in Neutron Stars Investigated by Experiments and Astronomical Observations”.

Host

The symposium is hosted by the Grant-In-Aid for Scientific Research on Innovative Areas, “Nuclear Matter in Neutron Stars Investigated by Experiments and Astronomical Observations”, MEXT, Japan.

Web site

More information on the symposium will appear later at
<http://lambda.phys.tohoku.ac.jp/nstar/>

Topics

- Astronomical observations of neutron stars
- Theoretical studies on neutron stars
- Equation of state of nuclear matter
- Neutron-rich nuclei and neutron skins
- Strangeness in nuclei
- Nuclear force and baryon-baryon interactions
- Ultra-cold atoms and equation of state
- High density nuclear matter and quark matter

Scientific sessions and Sakunami discussion session

The scientific sessions consist of invited talks, selected contributed talks, as well as a poster session. Progress reports from the “Neutron Star Matter” project team of the Grant-In-Aid will be also presented. The scientific sessions will be held in the “Aoba Science Hall” in the Aobayama campus of Tohoku University, Sendai, Japan from 9:00 am on Monday through early afternoon on Wednesday.

In the evening on Wednesday, we will have a “discussion session” at Sakunami for those who wish to attend it. The participants in the discussion session will move by bus to the hot spring hotel, “Ichinobo” at Sakunami, located in the suburb of Sendai, and stay there for one night together. We will have plenty of time for discussion in a relaxed atmosphere. The participants will come back to Sendai after breakfast.

Invited speakers (tentative)

T. Aumann (Darmstadt), G. Colo (Milan), C. Done (Durham),
J. M. Lattimer* (Stony Brook), D. Lonardon (ANL), Bao-An Li (Texas A&M),
K. Nakazawa (Gifu), Shina Tan* (Georgia Tech.), A. W. Thomas (Adelaide),
W. Trautmann (GSI), Y. Yamamoto (RIKEN) * to be confirmed

Registration fee

7,000 yen. It covers the welcome dinner, coffee, and refreshment in the poster session. In addition, participants in the discussion session at Sakunami need to pay 15,000 yen per person for one-night lodging at the hot-spring hotel including Japanese-style dinner and breakfast.

Important dates

- Second announcement and call for contribution abstract: August 15
- Abstract submission deadline: September 15
- Early registration and Sakunami hotel reservation deadline: October 15

Pre/post symposia

The following pre and post symposia will be held at the same venue.

- November 18 (Fri) – 20 (Sun), 2016

International School for Strangeness Nuclear Physics (SNP School 2016)

hosted by Graduate School of Science and Laboratory of Electron-Photon Science (ELPH), Tohoku University, and
Research center for Nuclear Physics (RCNP), Osaka University.

- November 24 (Thu) afternoon – 25 (Fri) morning, 2016

Asian Nuclear Physics Association Symposium 2016 (ANPhA2016)

hosted by Asian Nuclear Physics Association (ANPhA)

Organizing committee

T. Takahashi (KEK), H. Tamura (Tohoku, chair), T. Murakami (Kyoto),
T. Nakamura (Tokyo Inst. Tech.), M. Horikoshi (Tokyo), T. Takahashi (JAXA),
A. Ohnishi (Kyoto), T. Koike (Tohoku), K. Miwa (Tohoku),
S. N. Nakamura (Tohoku)