

## Workshop on ‘YN and YY interactions and neutron stars’

Date: 20<sup>th</sup> Nov., 2025

Place: Nishina Hall at Wako, RIKEN

if you are interested in attending the workshop, please fill the below format by 7<sup>th</sup> Nov. :

<https://forms.gle/KvNunyjpeaBqYrZB9>.

**10:00-11:00 Wolfram Weise (Technical University of Munich)**

Neutron star matter equation-of-state: inference and interpretations

**11:00-11:30 Tetsuo Hatsuda (RIKEN)**

Universal two-pion exchange from lattice QCD

**11:30-12:00 Kotaro Murakami (Institute of Science Tokyo)**

Interactions between (anti)kaon and nucleon from lattice QCD

**12:00-13:30 Lunch**

**13:30-14:00 Tetsuo Hyodo (The University of Osaka )**

Entanglement Suppression, Quantum Statistics and Symmetries in Spin-3/2 Baryon Scatterings

**14:00-14:30 Hirokazu Tamura (Tohoku University)**

Baryon modification in nuclear medium studied with hyperons

**14:30-15:00 Hiroshi Toki (The University of Osaka)**

Pion Nuclear Physics

**15:00-15:30 Koji Miwa (Tohoku University)**

Collaborative research to investigate hyperon-nucleon interactions from two-body scattering

**15:30-16:00 break**

**16:00-16:30 Kazuyuki Sekizawa (Institute of Science Tokyo)**

Exploring Neutron Star Physics Based on Density Functional Theory

**16:30-17:00 Shunji Nishimura (RIKEN)**

Experimental Challenges in identifying the Sites of r-Process Nucleosynthesis

**17:00-17:30 Kohsuke Sumiyoshi (National Institute of Technology (KOSEN), Numazu College)**

Hot-dense matter and neutrinos in core-collapse supernovae

**18:30- Dinner**