

# Kyoto-Soongsil Nuclear Physics Joint Workshop

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**Date and time:** 14:00-18:00, June 7 and 11:00- June 8, 2024

**Venue:** Room 318 (Fri 7) and 316 (Sat 8) White Horse Building, Soongsil University

**Zoom:** <https://us02web.zoom.us/j/83111694029?pwd=Ler2j3XmzYJKkSLgAbyQMrC7KclweG.1>

## Friday, June 7th

### Room 318, White Horse Building

Time	Speaker	Title
14:00- 14:45 (45)	Kenichi Yoshida (RCNP Osaka)	Proton-neutron pairing in neutron-rich nuclei
14:45- 15:20 (35)	Moemi Matsumoto (Tohoku)	Generator coordinate method with basis optimization
15:20- 15:55 (35)	Kotaro Uzawa (Kyoto)	Non-equilibrium Green's function approach to low-energy fission dynamics
15:55- 16:10 (15)		<i>Break</i>
16:10- 16:45 (35)	Kosei Nakagawa (Kyoto)	<b>(Online)</b> Dineutron correlation in $^8\text{He}$ using microscopic cluster model
16:45- 17:20 (35)	Kyoungsu Heo (OMEG/SSU)	Visualizing Interference effects by geometric approach
17:20- 17:55 (35)	Minkyu Lee (OMEG/SSU)	IR Spectra of Exotic Molecules, Including Isotopologues of Acetylene and Vinyl Acetylene
		<i>Dinner</i>

## Saturday, June 8th

### Room 316, White Horse Building

Time	Speaker	Title
11:00- 11:45 (45)	Kouichi Hagino (Kyoto)	Open issues in physics of SHE: nuclear reaction perspectives
11:45- 12:20 (35)	Chaehyun Yoon (OMEG/SSU)	Hydrogen molecule & Deuteron model study using Quantum Computer

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
12:20- 14:00 (100)		<i>Lunch break</i>
14:00- 14:35 (35)	Toi Tachibana (Kyoto)	The EOS of spin-polarized matter in RMF
14:35- 15:10 (35)	Tsuyoshi Miyatsu (OMEG/SSU)	Relativistic mean-field models for neutron stars in light of the PREX-2 experiment
15:10- 15:25 (15)		<i>Break</i>
15:25- 16:00 (35)	Yusuke Tanimura (OMEG/SSU)	Charge symmetry breaking effects with $\omega$ - $\rho^0$ mixing
16:00- 16:35 (35)	Myung-Ki Cheoun (OMEG/SSU)	Preliminary results for the correlations of the nuclear deformation and the pairing gaps in Pb and Hg isotopes
16:35- 16:50 (15)		<i>Break</i>
16:50-		Free discussions