

2nd OMU workshop “Recent advances in nuclear cluster physics”

Supported by NITEP

Date: 2024.8.1-2

Place: E108, Faculty of Science, Sugimoto Campus, Osaka Metropolitan Univ.

Program (Each talk 30 min + 10 min discussion)

| 8/1 | | Presenter | Affiliation | Title |
|-------|-------|--------------|-------------|--|
| 9:00 | 9:05 | | | Opening |
| 9:05 | 9:45 | B. Zhou | Fudan U. | Search for the Hoyle-analog state in light nuclei |
| 9:45 | 10:25 | Y. Funaki | KGU | Structure study of ^{20}Ne by 5-alpha OCM |
| 10:25 | 10:40 | Break | | |
| 10:40 | 11:20 | K. Nakagawa | Kyoto U. | The 3-body cluster structure and its breaking in ^8He and ^{12}C |
| 11:20 | 12:00 | Y. Yamaguchi | OMU | Cluster structure in the ground state of ^{20}Ne |
| 12:00 | 13:30 | Lunch break | | |
| 13:30 | 14:10 | M. Kimura | RIKEN | Shape of Light Clustered Nuclei |
| 14:10 | 14:50 | R. Barman | RIKEN | Structure and reactions of exotic nuclei in the island of inversion |
| 14:50 | 15:10 | Break | | |
| 15:10 | 15:50 | W. Horiuchi | OMU | Probes for exploring nuclear cluster structure |
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| 8/2 | | | | |
| 9:00 | 9:40 | T. Yamada | KGU | Nucleon correlations and many-body term effects in nuclear matter |
| 9:40 | 10:20 | N. Hinohara | Tsukuba | Alpha-removal strength in the Hartree-Fock-Bogoliubov approach |
| 10:20 | 10:40 | Break | | |
| 10:40 | 11:20 | S. Watanabe | Gifu Coll. | Investigation of the determination of nuclear deformation using high-energy heavy-ion scattering |
| 11:20 | 12:00 | T. Furumoto | YNU | Global Description of Light-Ion Elastic Scatterings from Microscopic Viewpoint |
| 12:00 | 13:30 | Lunch break | | |

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|-------|-------|--------------|----------|---|
| 13:30 | 14:10 | Y. Taniguchi | Fukuyama | Nuclear fusion reactions in astrophysical explosive phenomena |
| 14:10 | 14:50 | S. Aoyama | KEK | Few-body cluster calculation using quantum machine learning |
| 14:50 | 15:10 | Break | | |
| 15:10 | 15:50 | H. Masui | KIT | Looking back and seeing forward unstable nuclear physics |
| 15:50 | 16:30 | N. Itagaki | OMU | Novel cluster states consisting of jj-coupling shell-model states |
| 16:30 | | | | Closing & Free discussion |