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OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY  
沖縄科学技術大学院大学

THEORETICAL SCIENCES VISITING PROGRAM

# TSVP TALK

## Spontaneous Formation of Soft Matter

2024  
MON.

**Dec. 02**

**14:00–15:00**

**HYBRID** L4E48, ZOOM



For zoom and other details scan QR code or visit [groups.oist.jp/tsvp](https://groups.oist.jp/tsvp)



Visco-elasticity, large fluctuations, and inherent anisotropy, all contribute to the difficulties of simulating soft matter. To tackle these difficulties, stress control molecular dynamics simulation methods were developed. In these methods, the system is guaranteed to be under hydrostatic pressure (or constant surface tension) not only in equilibrium, but also during non-equilibrium time evolution. This makes it possible to simulate spontaneous transformation under well defined conditions. Self-organization of liquid crystal phases and soft matter crystals, as well as liquid-liquid transformation will be discussed

## Keiko Aoki

Keiko Aoki is an independent researcher based in Tokyo. Her main research field is condensed matter physics, and her main tool for research is molecular/particle dynamics simulation.

<https://groups.oist.jp/tsvp>

CONTACT

Office of the Dean of Research



[tsvp@oist.jp](mailto:tsvp@oist.jp)