

# APCTP SEMINAR

## Gravitational waves and bubble wall velocity in holographic first-order phase transitions

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*Galileo Galilei Institute for Theoretical Physics*

**June 3rd (Thu.) 16:00 (KST)**

**ZOOM Webinar**

Several scenarios of physics beyond the Standard Model involve hidden strongly-coupled gauge sectors. Cosmological first-order phase transitions predicted by strongly-coupled gauge theories may trigger the production of gravitational waves. As a result, the newborn gravitational wave astronomy constitutes a promising tool for probing beyond Standard Model physics. In the first part of the talk, I will discuss how top-down holography can be deployed to compute the spectra of gravitational waves coming from confinement/deconfinement and chiral symmetry breaking/restoration cosmological first-order phase transitions. In the second part, I will apply top-down holography to compute the steady-state velocity of the bubble walls nucleated in chiral symmetry phase transitions.

### ■ ZOOM Webinar

- 1) Please register through this ZOOM link  
<https://zoom.us/meeting/register/tJYpd-yqrTwtE91NqHO65Z3WLdrflOOpJNNI>
- 2) Join the webinar with a link generated after the registration
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