

## Exploring Submicrometer OLEDs

### Abstract:

Miniaturization of modern electronics has followed the Moore's law, exponentially boosting our computational power. Miniaturization of solid-state optoelectronic devices, however, is significantly lagging behind due to considerable efficiency drop in microLEDs, particularly beyond the submicrometer scale. The bottom-up fabrication of OLEDs can in principle bridge the gap, whereas processing of organic semiconductors is usually not compatible with solvents-involved photolithography. In this talk, I will present our recent progress of exploring submicrometer OLEDs, including the fabrication using the Molecular-Beam Holographic Lithography (MBHL) as well as their nanophotonic applications.