

PBH from EWPT and its GW signal

Saturday, 27 September 2025 11:30 (30)

The PBH can be formed during a delayed EWPT. Using xSM as a benchmark, we identify the features of the parameter space that tend to generate large fraction of PBH, which can be explored by collider searches and GW experiments aiming at the GW signal from EWPT. On the other hand, the PBH can form binaries either with another PBH or with astrophysical BH. GW will also be emitted from the evolution of such binaries. We performed the analysis based on such GW signals which can also cover the interesting parameter space of BSM models.

Primary author(s) : WU, Yongcheng (Nanjing Normal University)

Presenter(s) : WU, Yongcheng (Nanjing Normal University)

Session Classification : Plenary