Contribution ID: **27** Type: **not specified**

Collider probes of the Electroweak phase transition for scalar extended models

The detection of the gravitational wave provides new opportunities to probe the evolution of the early Universe. On the other hand, the current and future collider experiments will also play important roles in probe new physics. One of the connections ties on the Electroweak phase transition associated with the scalar sector. The modification from the extended scalar sector will be important to achieve strong 1st order phase transition which can hence be probed through its gravitational wave signal. However, such modification will also be reflected in collider searches. In this talk, I will briefly talk, based on my previous works, about the collider coverage of the EWPT and its complementarity to GW probes.

Primary author: WU, Yongcheng (Nanjing Normal University)

Co-authors: GONCALVES, Dorival (Oklahoma State University); GUO, Huaike (University of Utah); Prof. BIAN, Ligong (Chongqing University)

Presenter: WU, Yongcheng (Nanjing Normal University)