

A Brief Report on the International Conference on

Current Developments in Quantum Field Theory and Gravity

The Conference was successful in highlighting some of the recent developments that have taken place in quantum field theory and gravity, aspects of gauge/gravity correspondence with emphasis on their possible applications, symmetries in quantum field theory and gravity and also the recent developments in holographic entanglement entropy and complexity. Formal aspects in quantum field theory like locality and causality were discussed. Entanglement dynamics for the entanglement entropy in an interacting many body system was also discussed. On the gauge/gravity correspondence side, a duality between the free $O(N)$ vector model and higher spin gravity theories was revealed. Aspects of integrability and symmetry were discussed in PT-symmetric systems.

In cosmology, restoration of unitarity in anisotropic quantum cosmology was discussed. Some new aspects of Hawking radiation was brought to the attention. Recent developments in analytic bootstrap techniques in conformal field theory were revealed. Symmetries in nonrelativistic systems and their connection with Newton-Cartan gravity were also discussed.

There were 26 Invited talks in the Conference which included 5 International speakers and 25 Contributed talks presented by Ph.D. students, postdocs and faculties in various Institutions.