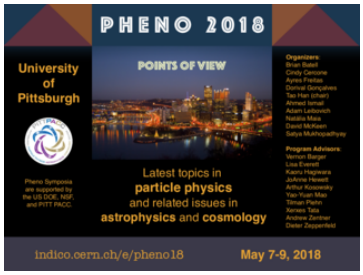

Contribution ID: **539** Type: **parallel talk**

Anisotropies in the Gravitational Wave Background from Cosmological Phase Transitions

Tuesday 8 May 2018 14:00 (15 minutes)

Phase transitions in the early universe can readily create an observable stochastic gravitational wave background. I will argue that such a background necessarily contains anisotropies analogous to those of the cosmic microwave background (CMB) of photons, and that these too may be within reach of proposed gravitational wave detectors. Correlations within the gravitational wave anisotropies and their cross-correlations with the CMB can provide new insights into the mechanism underlying primordial fluctuations, such as multi-field inflation, as well as reveal the existence of non-standard “hidden sectors” of particle physics in earlier eras.

Summary

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