

Abstract

We study Weyl symmetry for non-relativistic conformal field theories on curved spatial spaces, and calculate its quantum anomaly. We show that there is no geometric anomaly, and the non-relativistic Weyl anomaly can appear only due to interaction. Also we study the anomaly by using the light-cone approach. Also We show that entanglement entropy is zero in non-relativistic quantum field theories in contrast with the result of <http://arxiv.org/abs/0909.0277>.