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Thermal corrections to Electroweak Decays SAMINA MASOOD, University of Houston Clear Lake — We study the electroweak processes at finite temperatures. This includes the decay rates of electroweak gauge bosons and beta decays. Major thermal corrections come from QED type radiative corrections. Heavy mass of the electroweak gauge bosons helps to suppress the radiative corrections due to the electroweak gauge boson loops. Therefore, dominant thermal corrections are due to the photon loops. We also discuss the relevance of our results to astrophysics and cosmology.

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