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Production of Thermal Axions across the ElectroWeak Phase Transition

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If there are light axions in nature they will very probably leave a cosmic background, just like neutrinos. In this work we complete the study of thermal axion production above the QCD Phase Transition (QCDPT) by including the scatterings of the axion with the longitudinal components of the W and Z bosons. We study the predictions for pa4ticular QCD axion scenarios, like the KSVZ and the so-called Minimal Flavour Violating Axion.

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