In this talk, I will discuss the possibility of having non-Abelian gauge fields in the matter content of inflation. I will explain how the early non-Abelian gauge fields contributes to the physics of inflation and leaves unique features on CMB as its fingerprint. Among them, is the generation of chiral gravitational waves which leads to parity odd CMB correlations. Moreover, due to its intrinsic chiral gravitational waves and through the gravitational anomaly in SM, these scenarios provide a natural setting for inflationary leptogenesis.