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**Parker Solar Probe observations of quasi-periodic Type III radio waves: Evidence for modulation of electron acceleration in the corona<sup>1</sup>**  
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Type III radio bursts have long been used as remote probes of electron acceleration in the solar corona. Most studies of periodic and quasiperiodic behavior of radiation from the sun have focused on large events – large flares or coronal mass ejections. The occurrence of periodic behavior in interplanetary Type III bursts observed by Parker Solar Probe when there are no observable flares provides a unique opportunity to diagnose small-scale acceleration of electrons in the corona. Because these events are not associated with observable flares, the acceleration process must be associated either with small nanoflares, or with some other mechanism such as kinetic Alfvén waves. The correlated periodicities in coronal EUV lines suggest that these small scale processes may be important for coronal heating. We focus on coordinated observations of Type III radio bursts from the Fields instrument on Parker Solar Probe, of EUV emissions in the 211Å and 171Å bands by the SDO/AIA, and of solar flare x-rays by Nuclear Spectroscopic Telescope Array (NuSTAR) on April 12, 2019. Periodicities of ~5 minutes in the EUV in several areas of an active region are well correlated with the repetition rate of the Type III radio bursts. NuSTAR x-rays provide evidence for a flare during the interval of Type III bursts, but there is not a 1-1 correspondence between the x-rays and the Type-III bursts. Collaborators: L. Glesener, B. Leiran, PSP Fields Team

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