



**RADIO SCIENCE  
FOR HUMANITY**

## **Solar Radio Bursts and Their Space Weather Impacts** *Impacts des salves solaires sur le "Space Weather"*

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The Sun can produce a wide range of highly variable emission across the electromagnetic spectrum.

During times of elevated solar activity, explosions and eruptions called flares and coronal mass ejections can be accompanied by radio bursts at frequencies from microwave to decametric wavelengths and beyond.

These phenomena can result in adverse space weather at Earth, causing interruptions and damage to a wide variety of technologies on which we depend on as part of our daily lives. For example, satellite electronics can be damaged, GNSS/GPS signals can be interrupted, and terrestrial radio communications can be significantly degraded.

In this talk, I will describe the physical origins of solar radio bursts, what their technological impacts are, and how we are currently monitoring the radio Sun. In addition, future requirements for systems to study and monitor solar radio and space weather will be discussed.