

I am an astronomer who has had a long career in radio astronomy since 1975. I am writing to you to provide comments on the proposed rule-making, RM-9740. This proceeding deals with unwanted emissions from satellites and, if modified carelessly, could significantly damage the ability of radio astronomers and earth scientists to successfully produce useful scientific results.

Spurious emissions, from satellites now pose the greatest threat to radio astronomy. Radio observations represent a unique window on the universe, providing scientific data unavailable from telescopes operating at visible-light wavelengths or other parts of the electromagnetic spectrum. Of the ten astronomers who have won the Nobel Prize in Physics, six of them used radio telescopes for their work. The future advancement of astronomy and of physics is dependent upon the preservation of the radio spectrum for observation of the universe with radio telescopes. Relaxing regulations on spurious emissions from satellites will potentially harm these observations.

Because of the sensitivity of radio telescopes, they have been, much like the canary in the mine, the first facilities to suffer from unwanted satellite emissions. However, other services also have begun to be affected, and the problem will only grow as the use of radio spe