

# On Solar Radio Imaging-Spectroscopy

<sup>1</sup>Yihua Yan , <sup>2</sup>Jian Zhang, <sup>1</sup>Zhijun Chen, <sup>1</sup>Wei Wang, <sup>1</sup>Fei Liu, <sup>1</sup>Lihong Geng ( <sup>1</sup>*Key Lab of Solar Activity, NAOC,* <sup>2</sup>*Department of Astronomy, Peking University* )

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The Chinese Spectral Radioheliograph (CSRH) has been supported as National Major Scientific Research Facility Program of China and is presently under construction in a radio quiet region in Inner Mongolia of China. It will open new observational windows on flares and CMEs at radio wavelengths by mapping the radio emission from unstable electron populations during the basic processes of the solar magnetic energy release. The merits of CSRH are to cover wide frequency range (0.40-15.00GHz) with high spatial, spectral, and temporal resolutions. The array of CSRH-I in 0.4-2 GHz with 40 4.5m antennas has been established and starts test observations. The array of CSRH-II in 2-15 GHz with 60 antennas will be established by 2013. CSRH will provide synthesized full-disk solar images at multi-frequencies with high cadence. From these images the coronal magnetic field distribution with intensities and directions, non-thermal electrons, and other plasma parameters including temperature, density, etc., can be derived. The prospects of CSRH project are discussed.