THE VLA EXPANSION PROJECT

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Project Goal

- To improve, typically by a factor of ten, the technical capability of the Very Large Array in every key observational characteristic:
  - Senstivity
  - Frequency Accessibility
  - Spectral Capability
  - Resolution
  - Surface Brightness Sensitivity

Possible observations include

- 3D solar tomography (cyclotron lines at diff. depths)
- imaging the dynamic heliosphere (through scattering & RM)

- **census of stellar activity in normal MS stars**
- **Galactic center (orientations and strengths from 0.1 to 100s of pc)**
- **galaxy haloes (spectral index mapping, pol'n)**
- **galaxy clusters (see next page)**
- **intergalactic mag. fields (Faraday rotation along adjacent lines-of-sight)**
- **high-redshift sources (both low and**