

FAST Proposal Coverpage

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Project Name:

Radio source monitoring and transients detection with FAST drift scan observations: the application of the direct demodulation techniques

Project Summary:

We propose to perform FAST drift scan observations in the commissioning phase across the well-known black hole binary Cygnus X-1 and some bright radio sources in order to demonstrate the application of the direct demodulation techniques to FAST multi-beam drift scan observations. Our scientific goal is to detect persistent radio sources we know (e.g., Cygnus X-1) or new transient radio sources in the drift scans and demonstrate the application of the technique. These test observations would help establish a practical real-time radio source monitoring and transient detection tool for future FAST drift scan observations.