

## The FAST Project In China

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China has embarked on a project to build the world largest radio telescope, a spherical dish of 500 meters in diameter in a karst depression in southwest Guizhou Province. The Ministry of Science & Technology and the Academy of Sciences approved \$800,000 for preliminary work on the project known as FAST in 1998.

The FAST is Arecibo - type, with duplicated collecting area and sky coverage. We suggest an active main mirror which is spherical in neutral state but reform the illuminated aperture of 300 meters in diameter into the proper parabolic. Such that observation can be done at its focus with a simple feed, since the 'spherical correction' has already been done at the ground. The feed cabin at focus is supported and moved directly by cables controlled by computer, which avoids a heavy and expensive focal pointing system.

We expect a markedly better performance from the FAST in SETI survey. The number of Sun-like stars targeted by Phoenix project within certain range will be increased by at least 5 times, if the FAST is involved in the observations. Moreover, the availability of multi-beam and large instantaneous bandwidth combine to improve the search speed as well.