

THE LARGE SKY AREA MULTI-OBJECT FIBRE SPECTROSCOPY TELESCOPE (LAMOST)

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Abstract

In China, we will start to build a new spectroscopic survey telescope. It will be a meridian reflecting Schmidt telescope. The optical system is horizontal. The primary mirror is spherical and segmented. It faces towards the north. In its spherical center there is a plane mirror which is segmented too. The different shape of reflecting Schmidt plate is realized by active optics. The clear aperture is 4 m and f-ratio is 5. The angular field of view is 5 square degree, 4000 objects can be observed simultaneously by using optical fibre. The science goal is to make a 20000 square degrees spectroscopic survey, including ten million galaxies and stars, many variable objects and the identification of numerous objects found by radio, x-ray, IR and other survey in these sky areas.