FASOT, AN INSTRUMENT TO REVEAL THE MAGNETIC COUPLING BETWEEN SOLAR PHOTOSPHERE AND CHROMOSPHERE

Zhongquan Qu, FASOT group

Yunnan Observatories, CAS, Tianwentai road, Guandu district, Kunming, Yunnan, China

The magnetic coupling among solar atmospheric layers is crucial for magnetic energy transportation and triggering the activities and variations. Therefore, an instrument is needed for tracking such a coupling. Fiber Arrayed Solar Optical Telescope (FASOT) is created for recovering simultaneously the vector magnetic fields, line-of-sight velocities and thermodynamic conditions of photospheric and chromospheric layers and thus revealing the magnetic coupling among these layers. This talk presents the preliminary observational results obtained by FASOT of the first generation, as well as the progresses made in shaping FASOT of the second generation.