

New great observational capabilities of the H-alpha Solar Telescope of Argentina (HASTA)

C. Francile¹, J. I. Castro¹, L. Leuzzi², M. Luoni³, M. Rovira³, A. Cornudella¹, W. Gómez¹ & R. Sarmiento²

¹ Observatorio Astronómico Félix Aguilar (OFA) - FCFN - UNSJ

² Departamento de Geofísica y Astronomía (OFA) - FCFN - UNSJ

³ Instituto de Astronomía y Física del Espacio (IAFE) - CONICET

We present an overview on the new instrumentation for the H-alpha Solar Telescope of Argentina (HASTA), located in “El Leoncito” at the “Félix Aguilar” observatory in Argentina, which extends its capabilities to observe the solar Chromosphere. Full frame observations of the complete solar disk are made at $H\alpha$ center line and also at line wings, with increased spatial and temporal resolution. A new 14 bits, 1600x1200 pixels CCD camera, the development of new image acquisition routines of 2 fps, a new Flat Fielding procedure, a new automatic focusing device, new flare classification routines and a web portal access of on line images and daily movies, allows a more detailed study of the solar activity, chromospheric wave propagation and fast impulsive events. A permanent observers staff allows for a continuous solar watching.