**the need for CHAT**

- Small telescopes in the 0.5-1m range are fundamental in following-up transit candidates from ground-based surveys, both for confirmation and detailed characterization.

- They can be an important complement to space-based surveys (e.g., for systems with few transits detected, low S/N transits) and to spectroscopic observations such as those of the ACCESS survey by providing simultaneous broad-band photometry.

- CHAT is a 0.7m telescope dedicated to measuring light curves from transiting exoplanets, serving the needs detailed above. First light was in 2017, and we have followed so far hundreds of candidates from HATSouth, and from other sources such as K2.

- In the future, a pool of systems arising from various programs, including HATPI and TESS will be followed-up systematically.

**OTA**: 0.7m f/7 modified Dall-Kirkham from Officina Stellare  
**Camera**: MicroLine by Finger Lakes; 2k×2k back-illuminated CCD  
**Pixel-scale** ≈ 0.6 arcsec/pixel; **FOV** ≈ 21 arcmin × 21 arcmin  
**Mount**: modified equatorial mount by Fornax  
**Filters**: Sloan griz filter complement by Asahi Spectral  
**Guiding**: External (Canon EF 400mm f/5.6 + MGEN) and internal (pick-off mirror + ZWO camera) guiding capabilities.

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**a light-curve automata**

CHAT works under a fully automated model mode where the full cycle from the scheduling down to providing publication quality light curves is autonomous. The figure below shows schematically the daily operations flow for CHAT.

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**the telescope at its home in the HATvillage@LCO in CHILE**

The HATVillage at Las Campanas Observatory in Chile. In the picture we can see HATSouth, HATPI, CHAT and the (Polish 1.3m).

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**some Light Curves**

Typical precision: 1mmag @1 min cadence for $V = 12$