

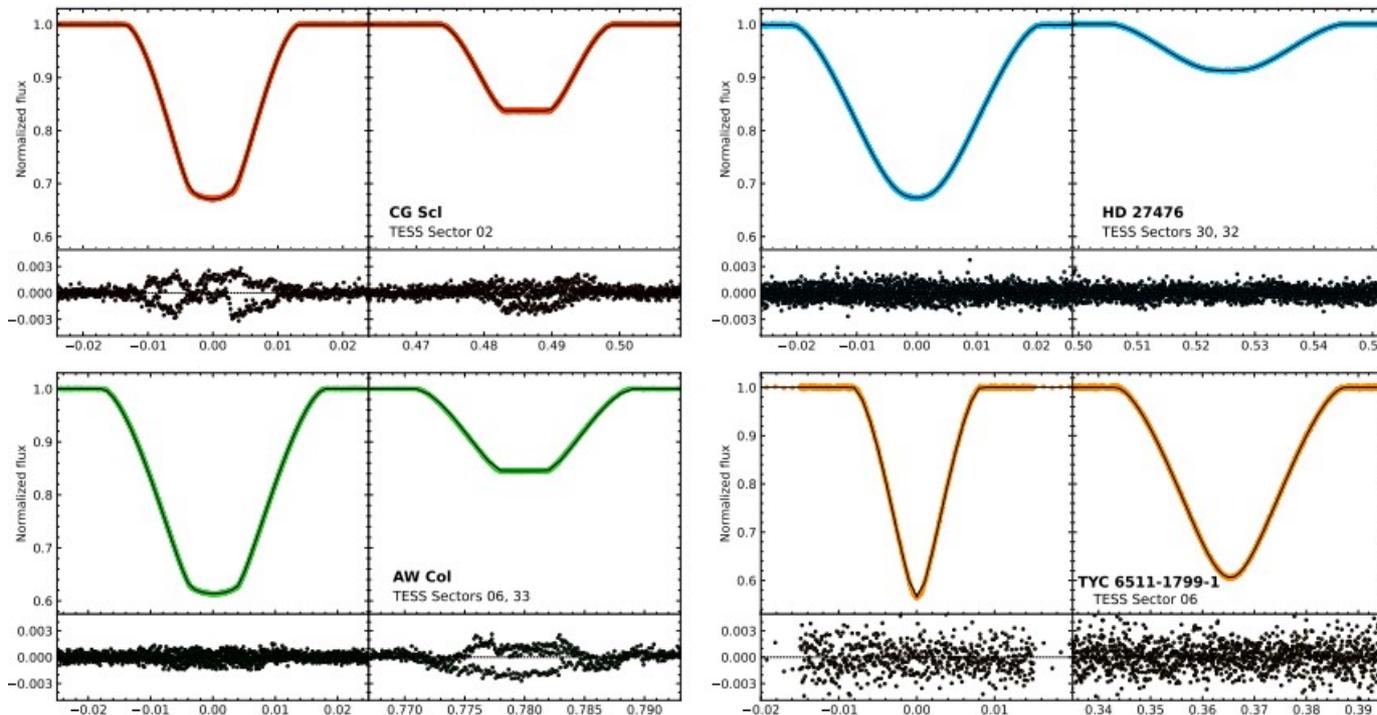
Annual Report 2025

Dariusz Graczyk
CAMK, Toruń, The Araucaria Group



Publications

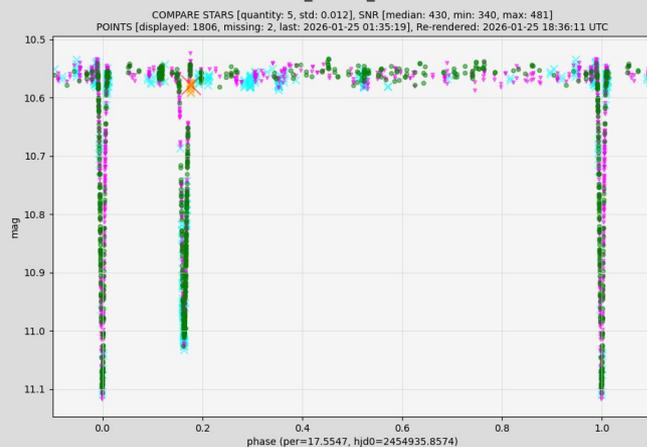
- 3 referred papers published as first author or co-author
 - Surface brightness-colour relations of dwarf stars from detached eclipsing binaries. Extension of the calibrating sample” **D. Graczyk**, et al., A&A, 2025, 694, 65



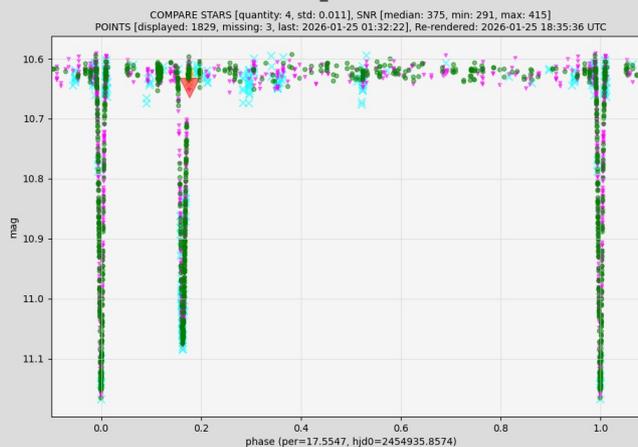
Observations

- Photometric multiband photometry of 40 detached eclipsing binaries in OCM
 - Testing Gaia DR4 zero point
 - SBCR calibrations with sub 1% precision

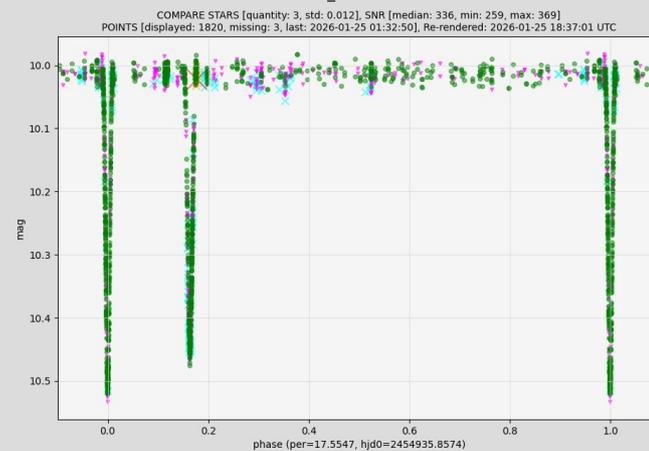
WK06 CD-41_1394 b_s INSTR. MAG



WK06 CD-41_1394 V STD MAG



WK06 CD-41_1394 Ic STD MAG



Publications

- Toward Early-type Eclipsing Binaries as Extragalactic Milestones. IV. Physical Properties of Three Detached O/B-type Systems in the LMC ” Taormina, M., et al., ApJ, 2025, 980, 178

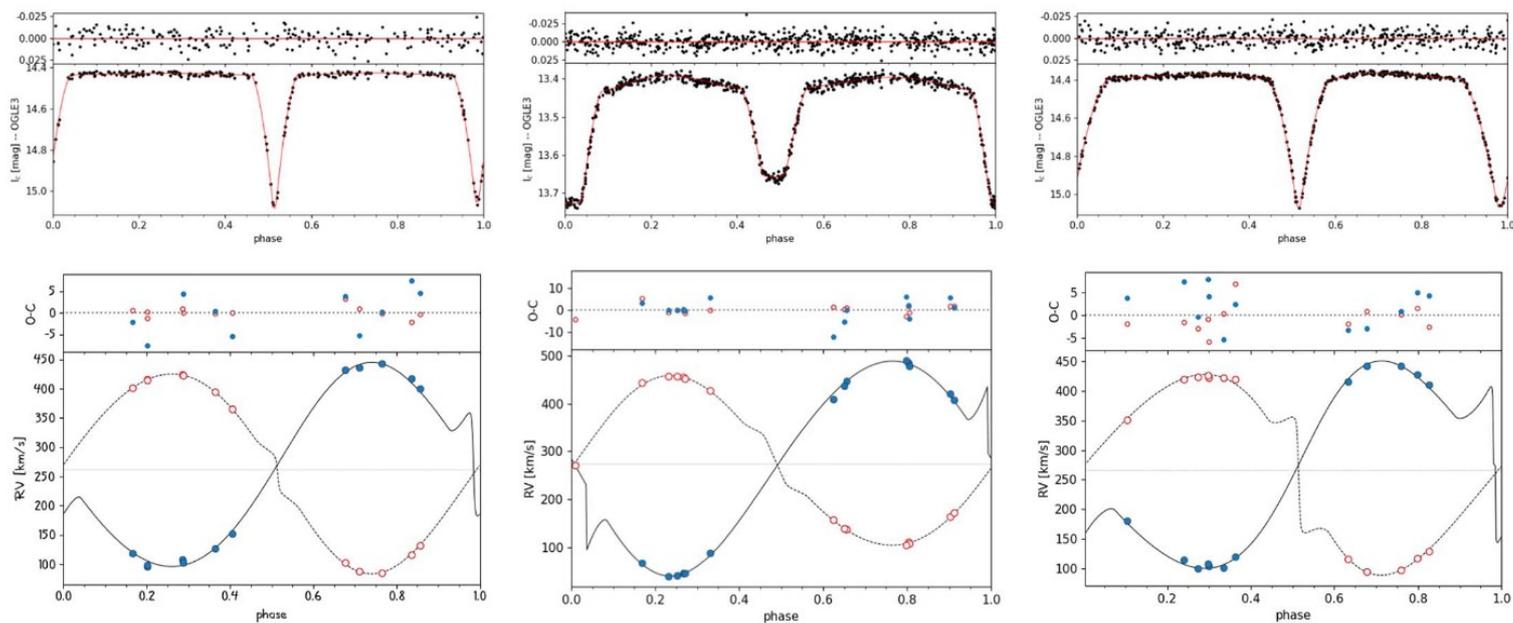
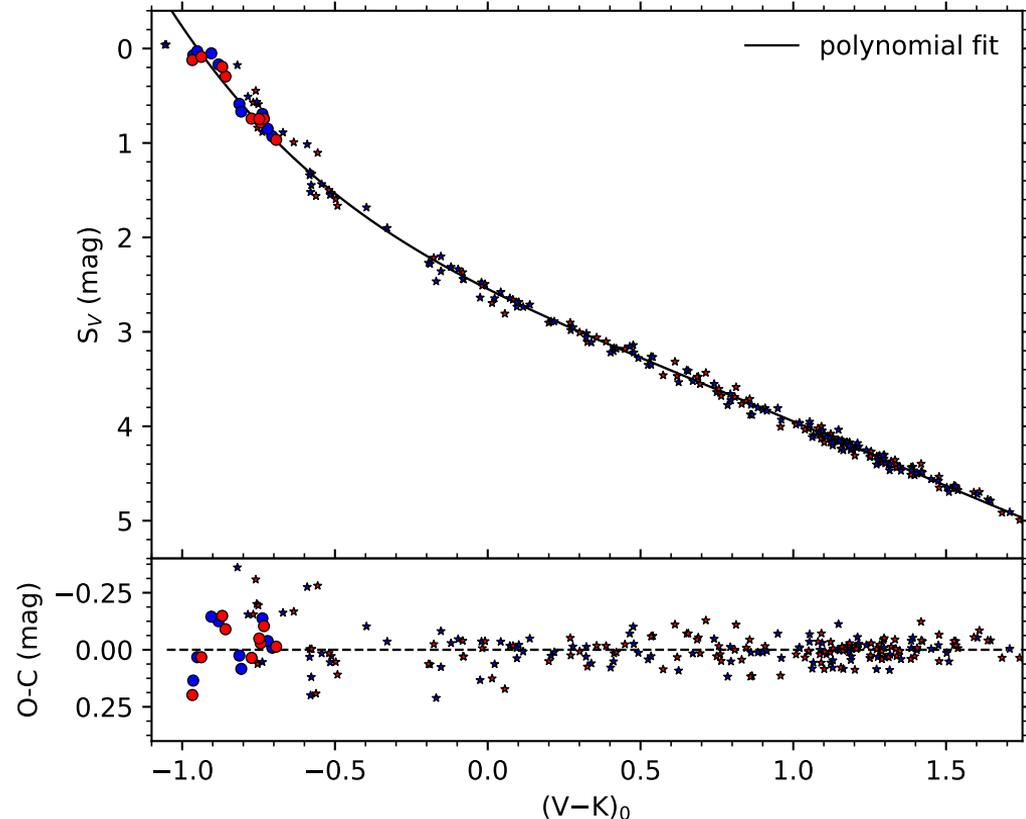
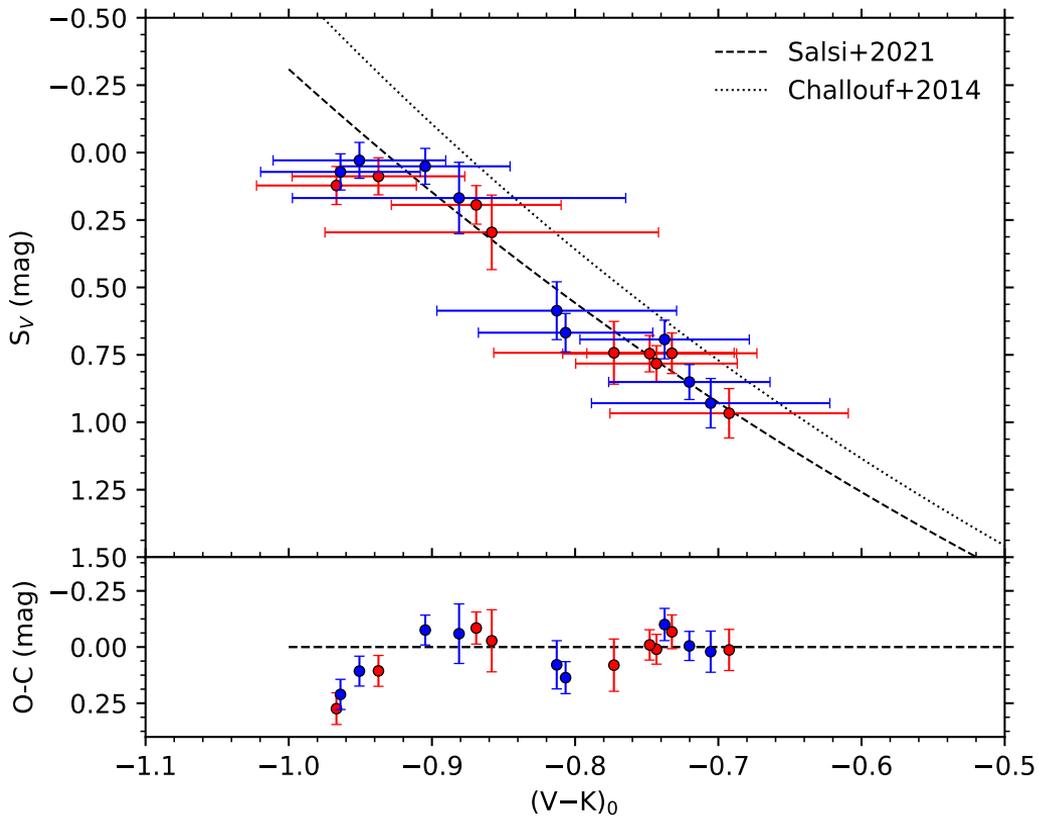


Figure 8. BLMC-04 (left panel), BLMC-05 (center panel), and BLMC-06 (right panel). Solutions for the I_c -band light curves (top panels) and RV curves (bottom panels) are shown.

Observations and analysis

- Preliminary results from early-type EBs in the LMC



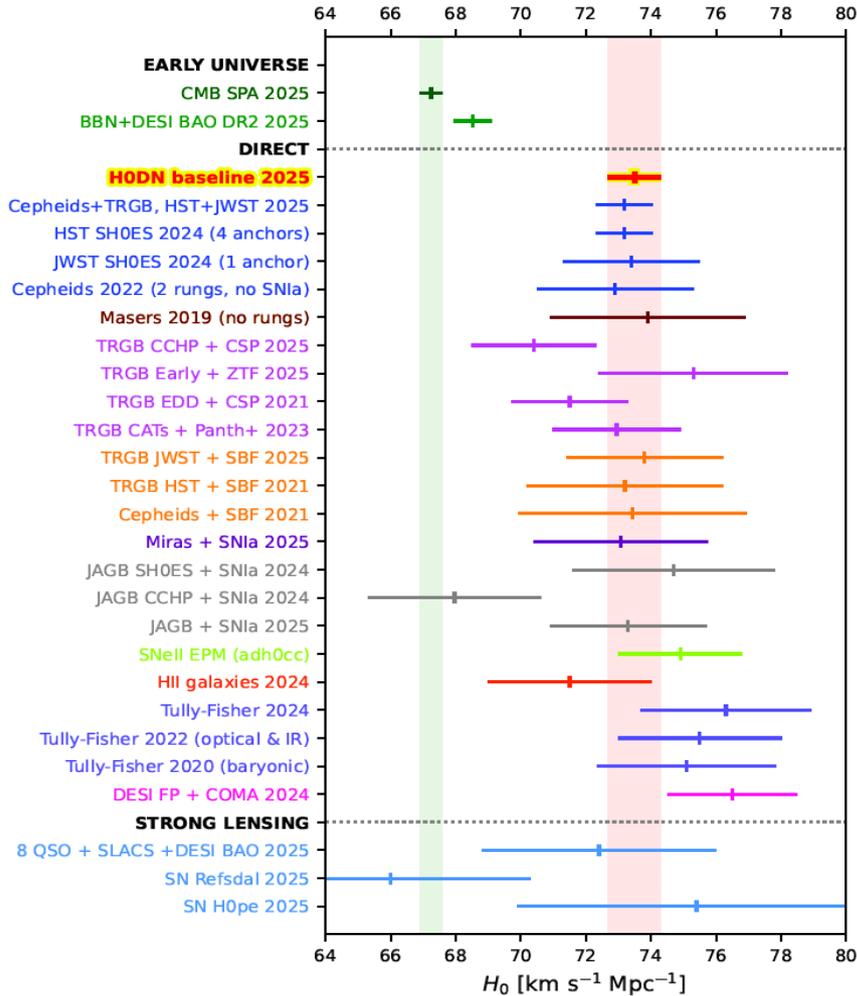
Conferences

- Binary Stars in the Space Era, Keele University, 30th June - 4th July, 2025
 - Invited talk: “Local distance scale with eclipsing binary stars”

Workshops

- What’s under the H0od? Towards Consensus on the local value of the Hubble Constant, ISSI, Bern, 24th March - 28th March, 2025

Workshops



The Local Distance Network to H_0

