



# Annual Meeting 2024



Felipe Espinoza Arancibia

Supervisor: Dr. Bogumił Pilecki



# Empirical instability strip for classical Cepheids

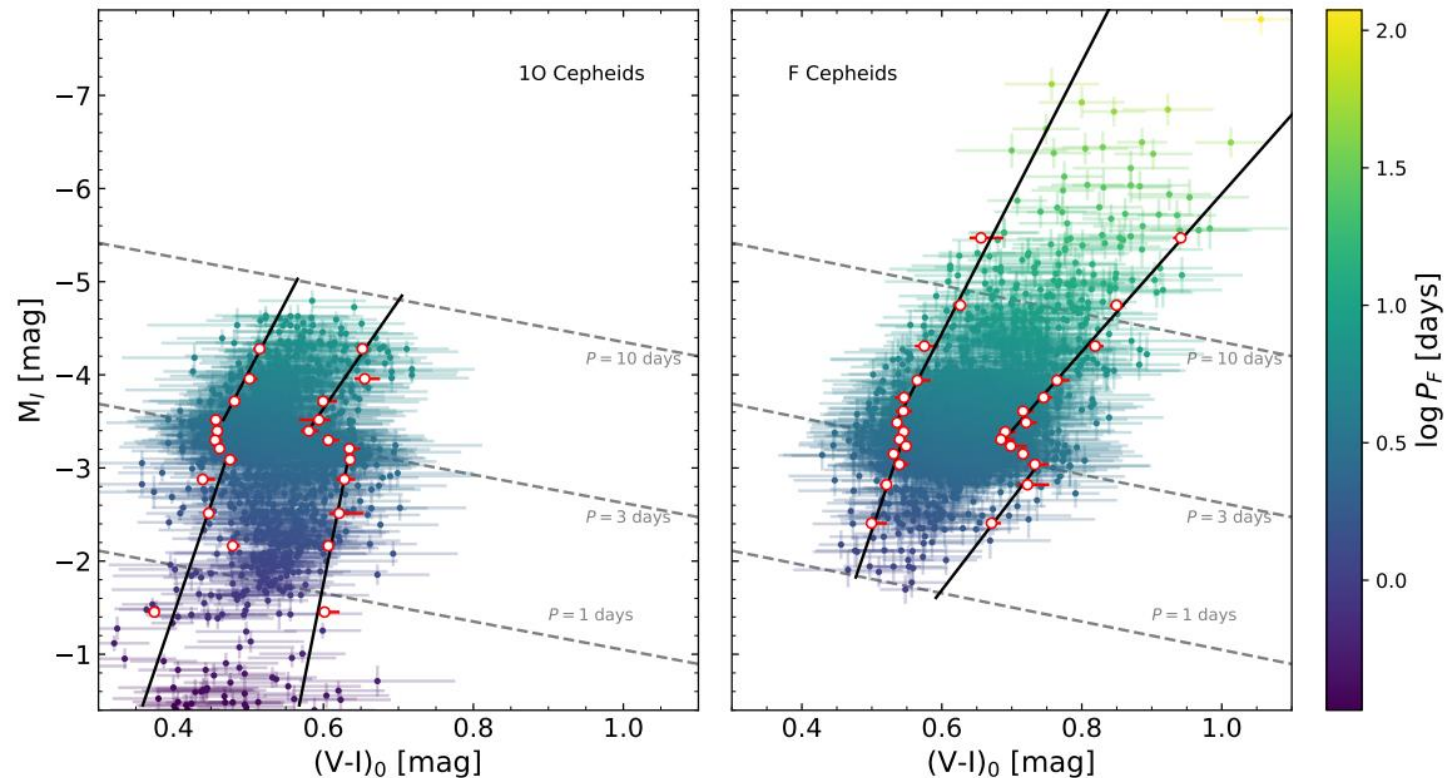
## I. The Large Magellanic Cloud galaxy

F. Espinoza-Arancibia<sup>1</sup>, B. Pilecki<sup>1</sup>, G. Pietrzyński<sup>1</sup>, R. Smolec<sup>1</sup>, and P. Kervella<sup>2</sup>

<sup>1</sup> Nicolaus Copernicus Astronomical Center, Polish Academy of Sciences, Bartycka 18, 00-716 Warsaw, Poland  
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Received 25 August 2023 / Accepted 24 November 2023



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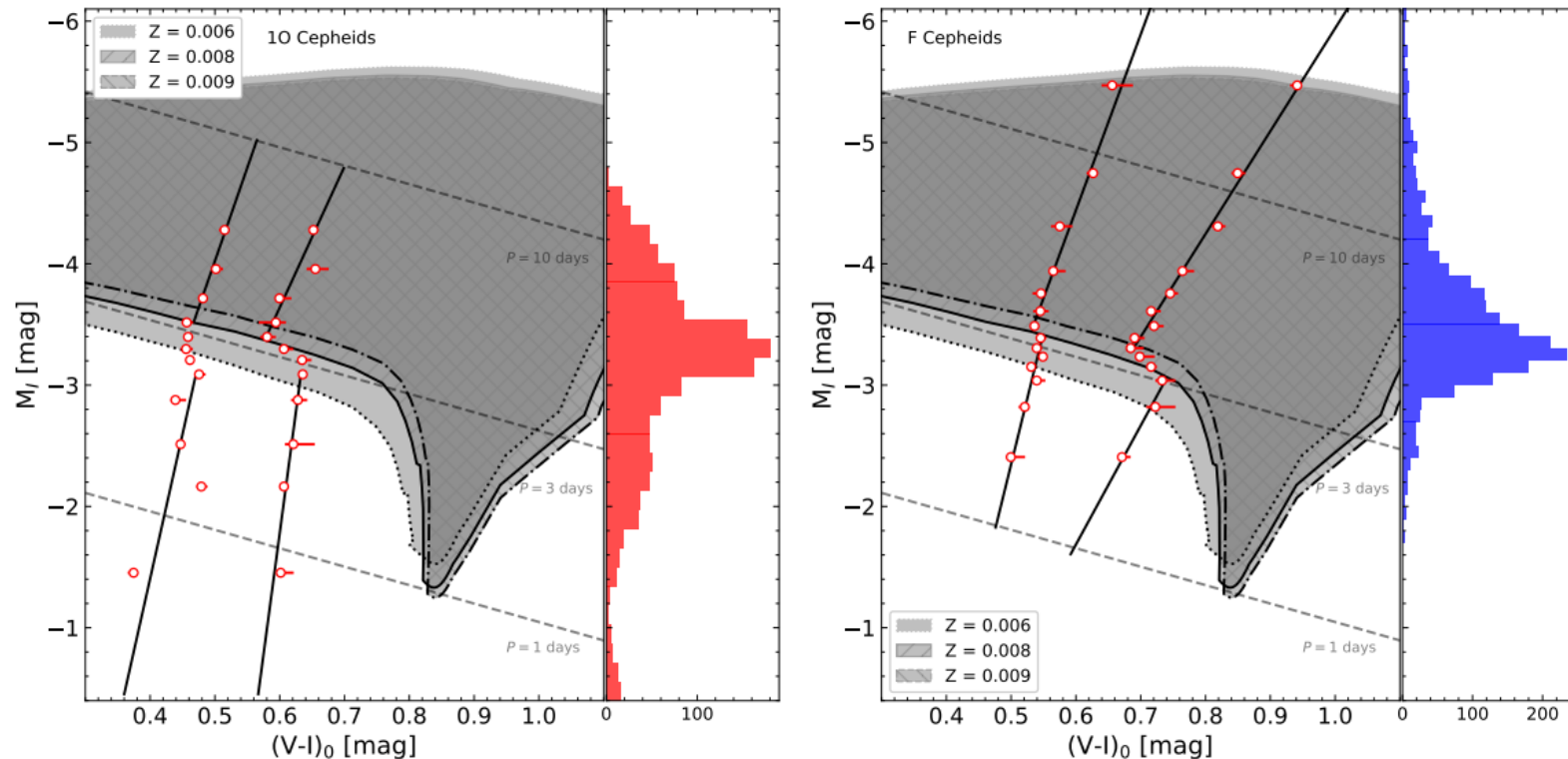
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# Empirical instability strip for classical Cepheids

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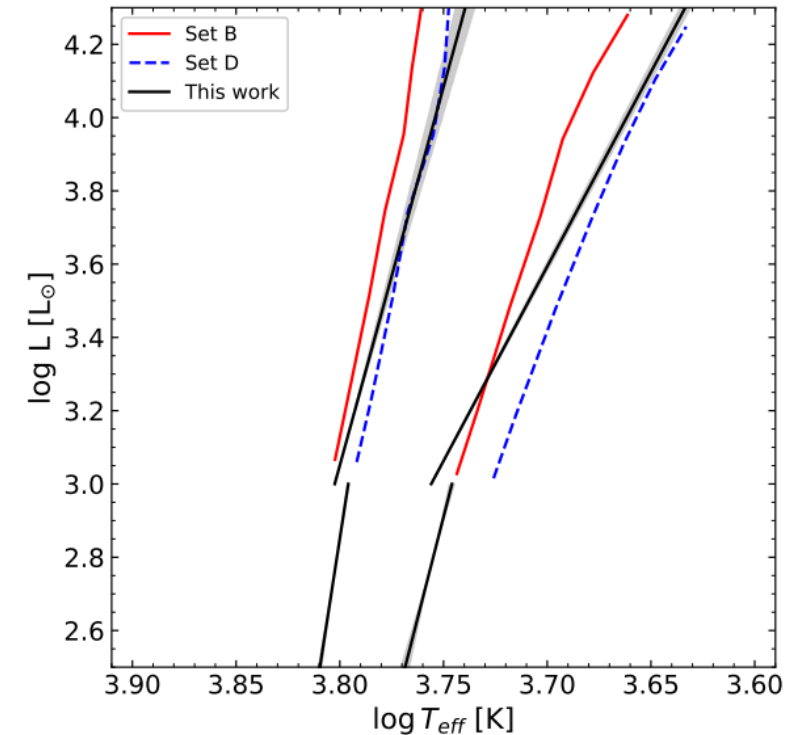
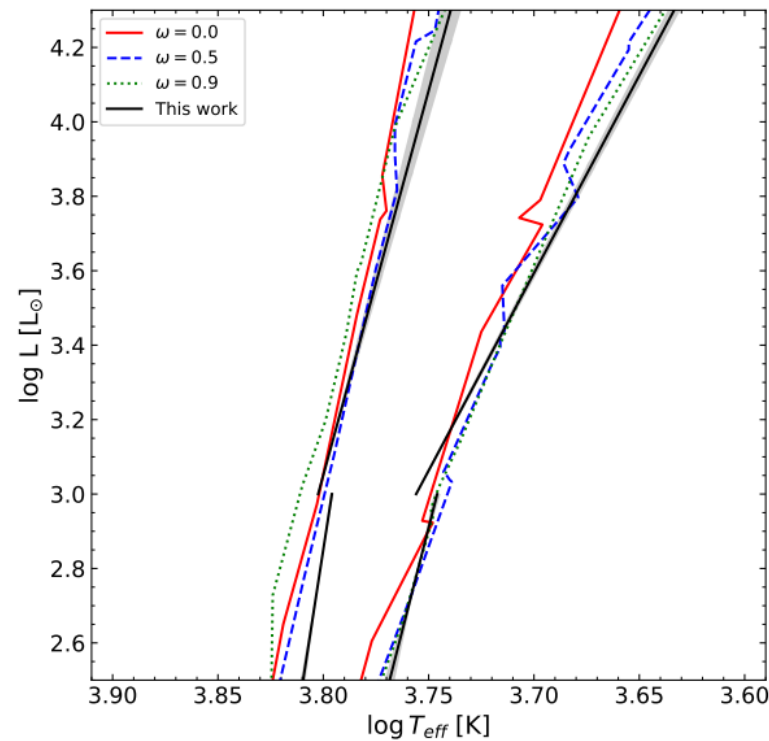
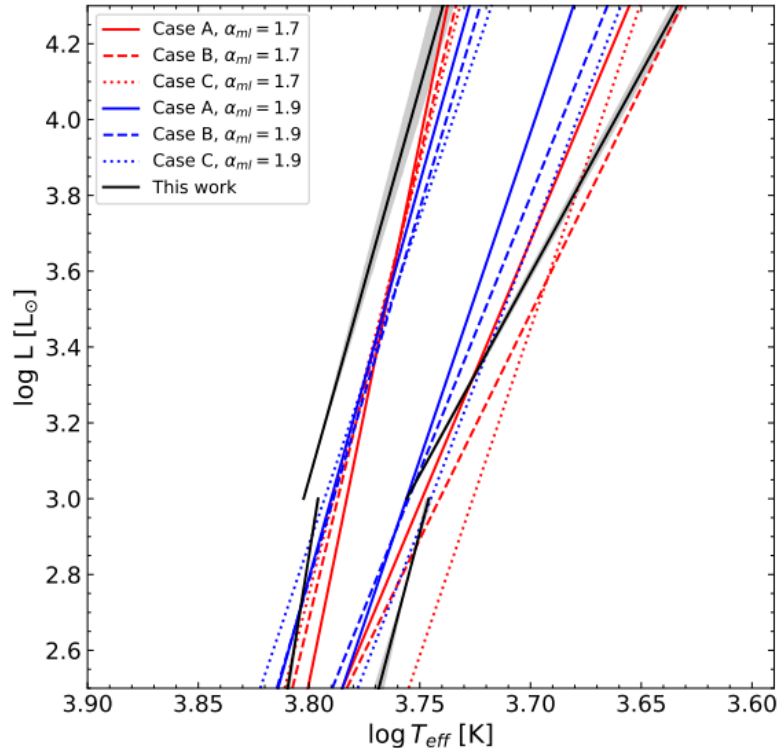
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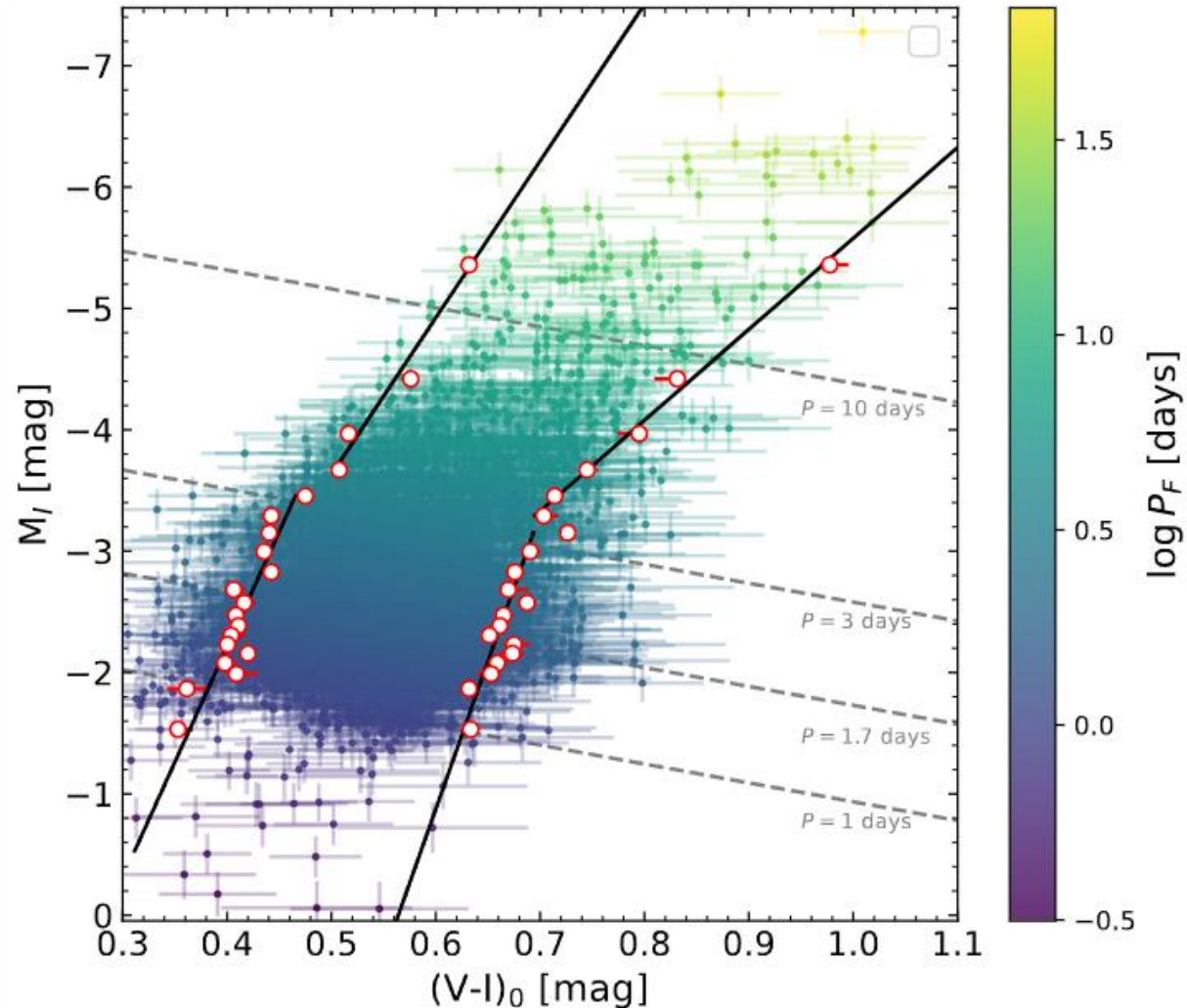
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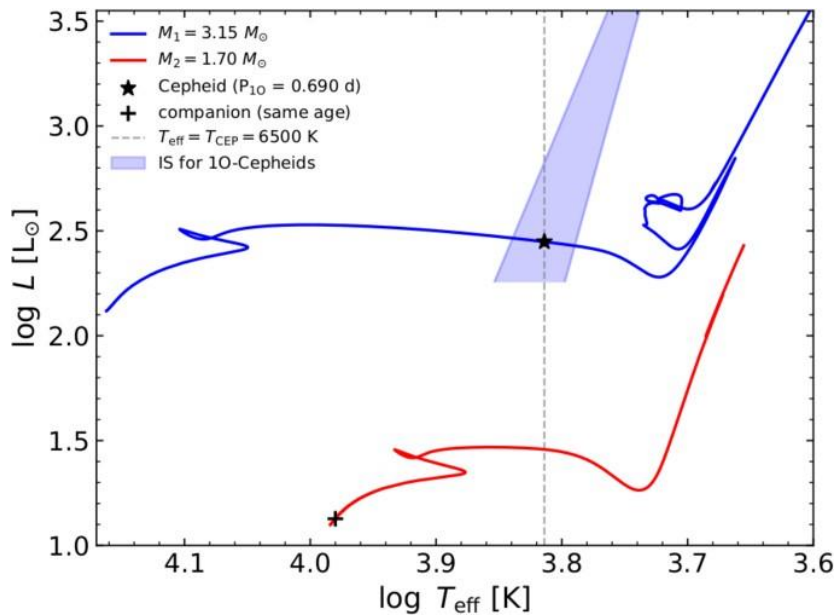
# Empirical instability strip for classical Cepheids II. The Small Magellanic Cloud galaxy

## In preparation...

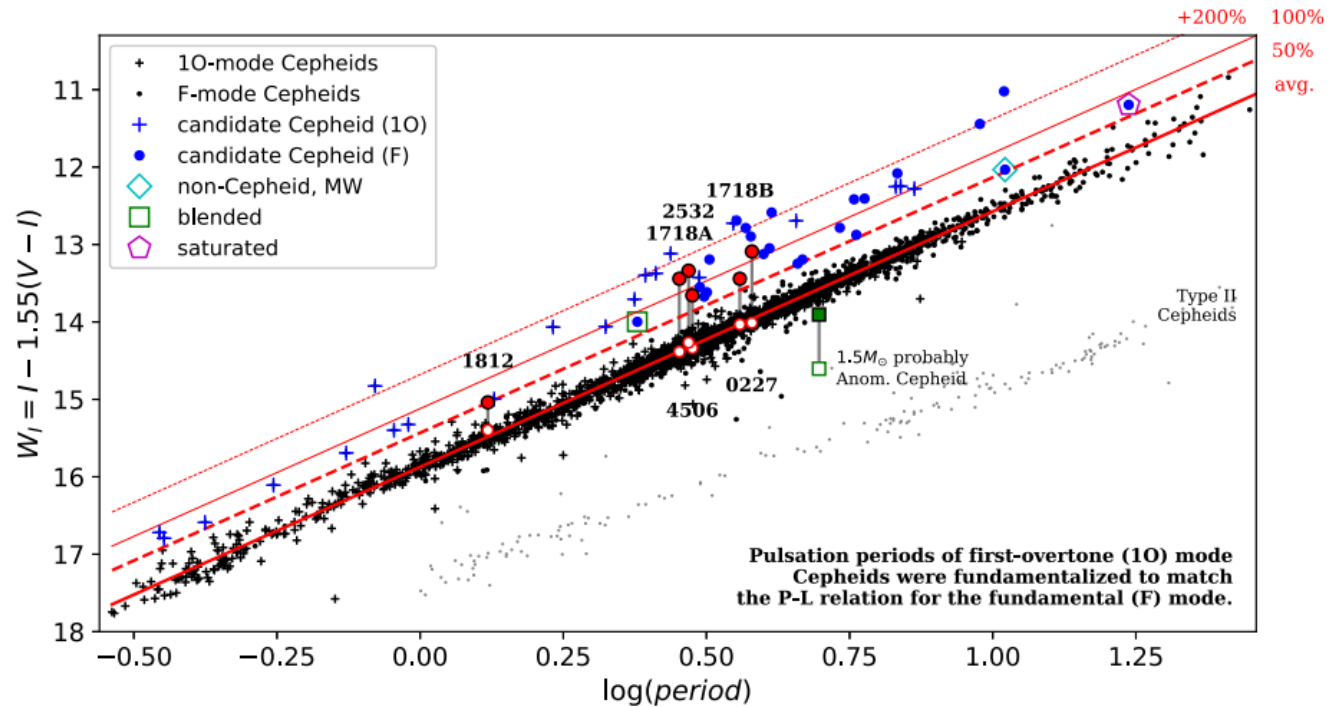


# Classical Cepheids in Double-lined Binary (SB2) Systems

- Contributing in the article Pilecki et al. 2023 (submitted)
- Working in the modeling of SB2 Systems



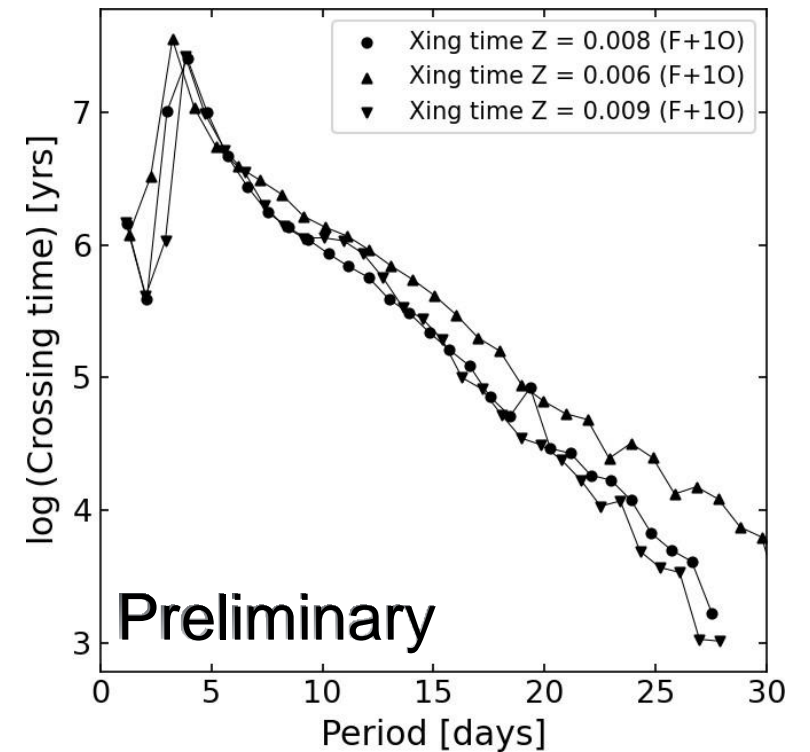
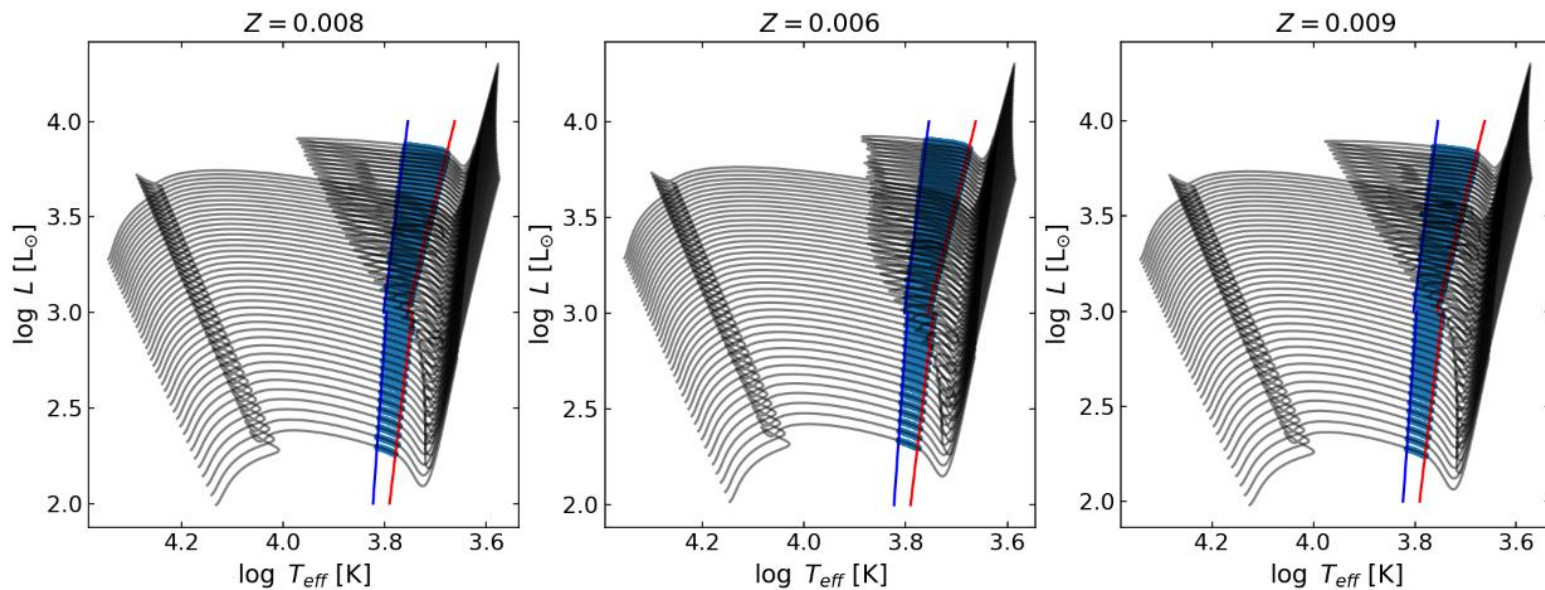
Pilecki et al. 2022, ApJL, 940, L48



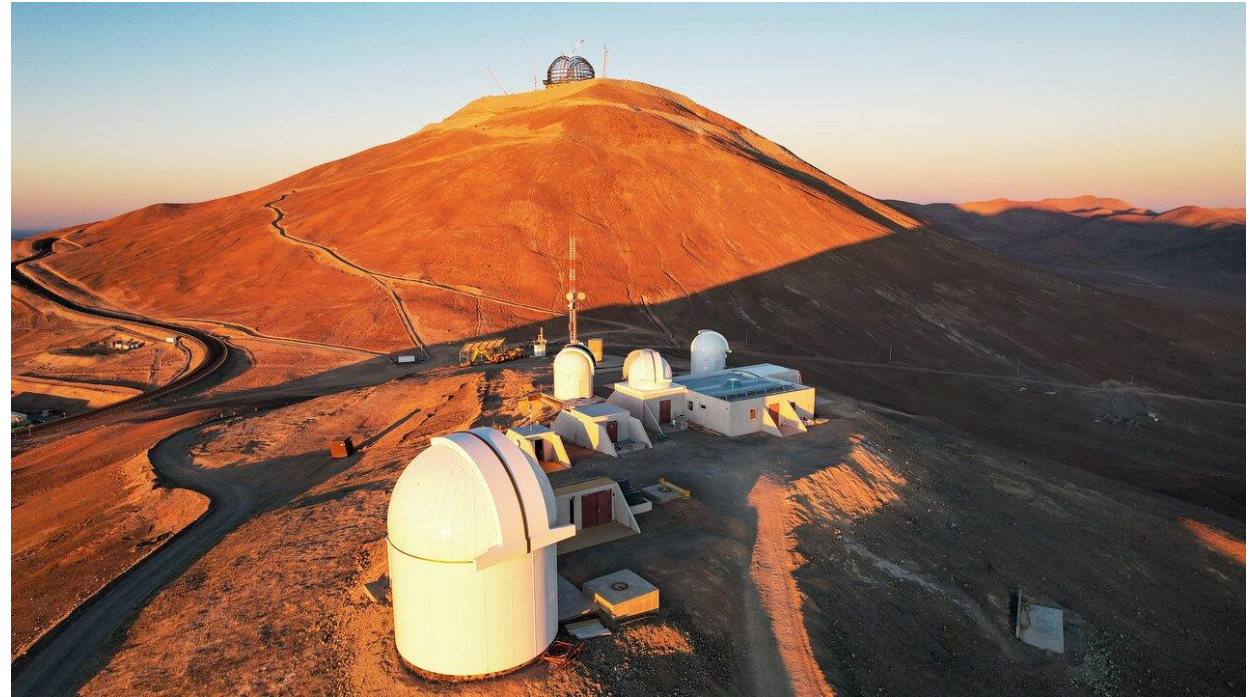
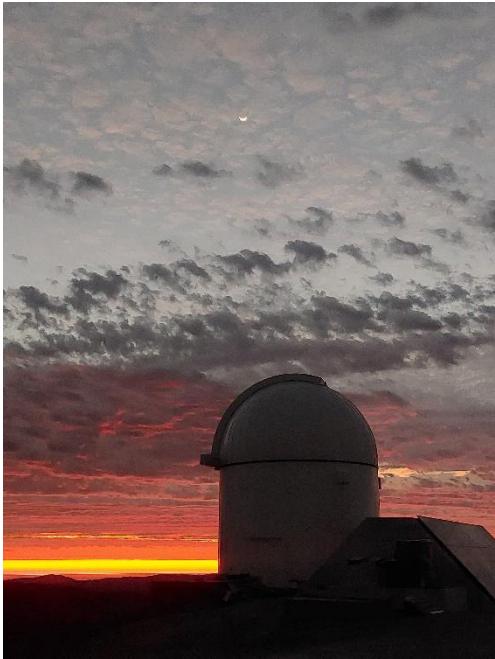
Pilecki et al. 2021, ApJ, 910, 118

# Summer Student Program 2023

- Title: Instability Strip of Classical Cepheids in the Large Magellanic Cloud
- Supervisors: Felipe Espinoza-Arancibia (CAMK PAN), Bogumił Pilecki (CAMK PAN)
- Student: Matylda Łukaszewicz



# Visit to Observatory Cerro Murphy







**IAU Symposium 376 | 17-21 April 2023**  
At the cross-roads of astrophysics and cosmology:  
Period-luminosity relations in the 2020s



# XLI MEETING

## of POLISH ASTRONOMICAL SOCIETY

100th anniversary of PTA  
(1923 – 2023)

TORUŃ  
11 – 15 September  
2023



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