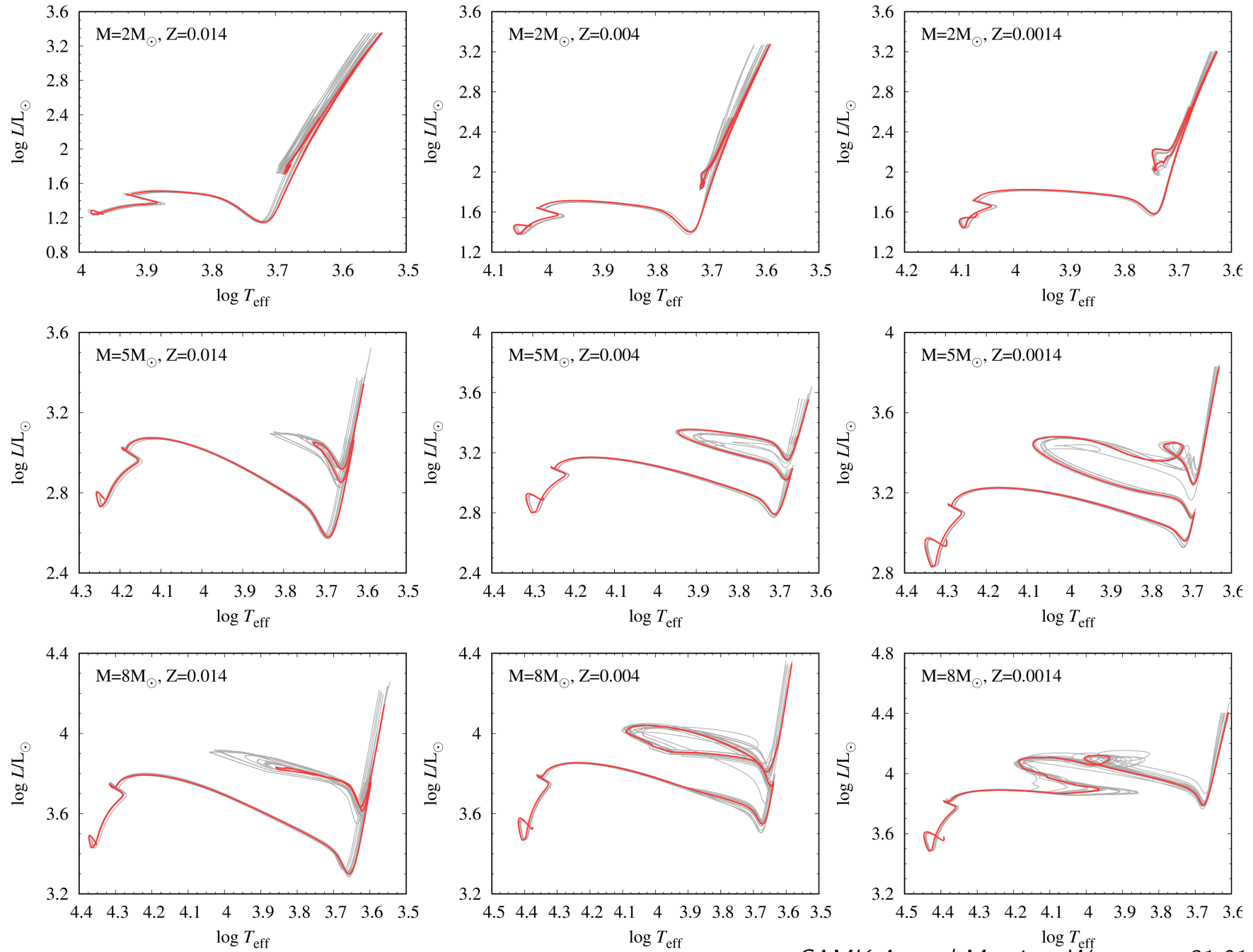


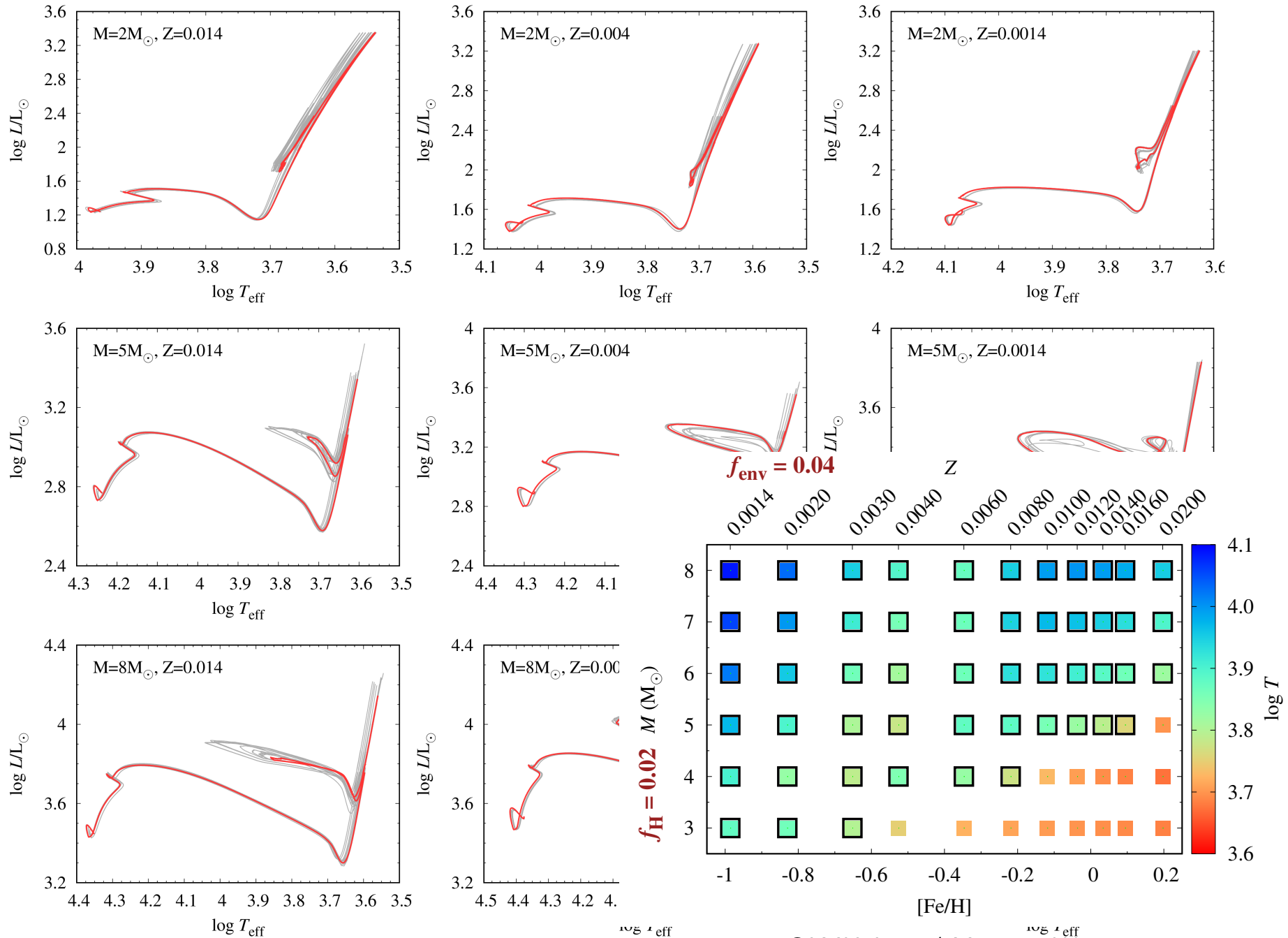
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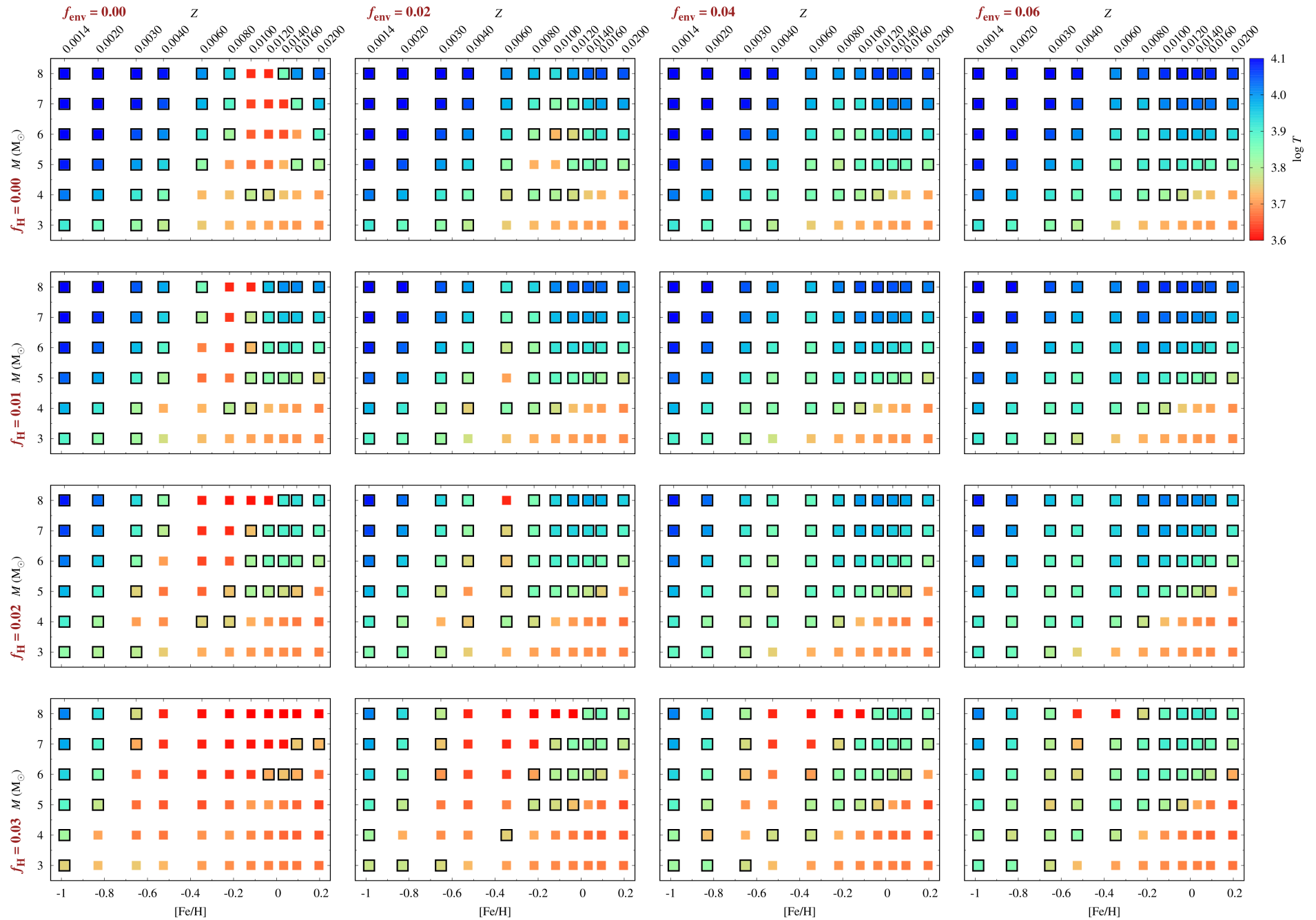
Radek Smolec

Refereed papers:

- ▶ *Modules for Experiments in Stellar Astrophysics (MESA): Time-Dependent Convection, Energy Conservation, Automatic Differentiation, and Infrastructure*
Jermyn et al., including **Smolec**, *ApJ Suppl. Ser*, **265**, 15 (2023)
- ▶ *Synthetic Population of Binary Cepheids. II. The Effect of Companion Light on the Extragalactic Distance Scale*
Karczmarek, **Smolec**, et al., *ApJ*, **950**, 182 (2023)
- ▶ *First Overtone Cepheids of the OGLE Magellanic Cloud Collection - beyond radial modes*
Smolec et al. *MNRAS*, **519**, 4010 (2023)
- ▶ *Metallicity estimation of MW, SMC and LMC classical Cepheids from the shape of the V- and I-band light curves*
Hocdé, **Smolec**, et al., *A&A*, **671**, A157 (2023)
- ▶ *Binary central stars of planetary nebulae in the Large Magellanic Cloud*
Gładkowski, Hajduk, **Smolec**, Szczerba, Soszyński, *A&A*, in press (2024)
- ▶ *Empirical instability strip for classical Cepheids: I. The LMC galaxy*
Espinoza-Arancibia, Pilecki, Pietrzyński, **Smolec**, Kervella, *A&A*, in press (2024)
- ▶ *Catalogue of BRITe-Constellation targets I. Fields 1 to 14 (November 2013 - April 2016)*
Zwintz et al. (including **Smolec**), *A&A*, in press (2024)
- ▶ *On the nature of Nova 1670 (CK Vulpeculae): a merger of a red giant with a helium white dwarf*
Tylanda, Kamiński, **Smolec**, *A&A*, in press (2024)
- ▶ *Pulsation modelling of the Cepheid Y Ophiuchi with RSP/MESA. Impact of the circumstellar envelope and a high projection factor on Baade-Wesselink method*
Hocde, **Smolec**, Moskalik, Singh Rathour, Ziółkowska, *A&A*, in press (2024)
- ▶ *A theoretical framework for BL Her stars – II. New period-luminosity relations in the Gaia passbands*
Das et al (including **Smolec**), *A&A*, in press (2024)
- ▶ +4 submitted







Group

- ▶ Rajeev Singh Rathour (PhD; Cepheids as testbeds of evol./puls. theories)
- ▶ Oliwia Ziółkowska (PhD; Cepheids as testbeds...)
- ▶ Vincent Hocde (post-doc; left in September)

Other major activities

- ▶ GeoPlanet Doctoral School
- ▶ developer of MESA (Modules for Experiments in Stellar Astrophysics; lecture at MESA Summer School)

