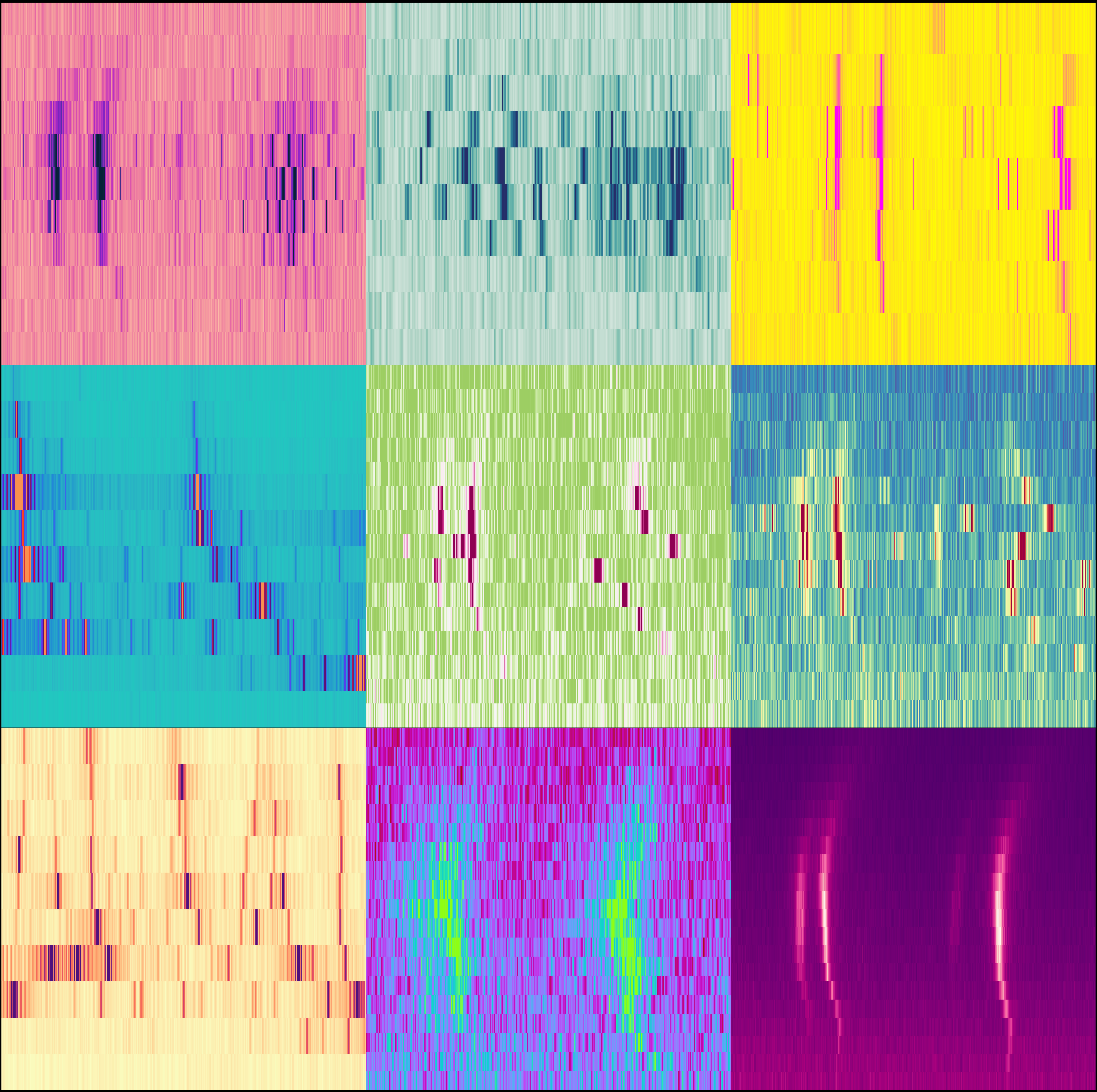


Asteroseismology Meets Art: The beautiful échelle diagram

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Since its introduction by Grec et al. (1983), the échelle diagram has proved to be an amazingly useful tool for helio- and astero-seismology. We present an artistic visualization that highlights the beauty and usefulness of échelle diagrams.

This artwork was produced to hang alongside other physics-themed posters on the walls of the School of Physics at University of Sydney.

RGB star KIC 5006817 (1.4M _⊙) v _{max} = 145 μHz Δv = 11.6 μHz (Bedding et al. 2010; Beck et al. 2014)	core He burning KIC 5000307 (1.3M _⊙) v _{max} = 42 μHz Δv = 4.8 μHz shifted by −0.05 (Silva Aguirre et al. 2014; Y. Li et al. 2022)	Kepler-56 misaligned exoplanet host v _{max} = 244 μHz Δv = 17.4 μHz (Huber et al. 2013; Ong 2025)
δ Scuti HD 99506 Δv = 7.05 c/d TESS data (Bedding et al. 2020)	subgiant “Zebedee” KIC 11137075 v _{max} = 1170 μHz Δv = 65.6 μHz shifted by −0.2 (Z. Tian et al. 2015)	low-L RGB star “Pooh” KIC 4351319 v _{max} = 387 μHz Δv = 24.6 μHz shifted by −0.08 (Di Mauro et al. 2011)
δ Scuti HD 32297 Δv = 7.06 c/d TESS data (Schneider et al. 2005; Murphy et al. in prep.)	F star HD 176071/KIC 9139163 v _{max} = 1720 μHz Δv = 81.1 μHz shifted by +0.2 (Lund et al. 2017)	the Sun v _{max} = 3090 μHz Δv = 135 μHz shifted by −0.2 SOHO/VIRGO data

The legend (left) gives details of the nine stars, which are arranged to approximately match their relative positions in the H-R diagram. All data are from *Kepler* except where indicated.

The échelle diagrams for some stars have been shifted horizontally by a small fraction of Δv for better visualization, as indicated in the legend.

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