

## EXPLORING THE PROGENY OF THE NEWLY DISCOVERED CO-SDO STARS

Miller Bertolami M. M.<sup>1,2,3</sup>, Battich T.<sup>3</sup>, Crsico A. H.<sup>1,2</sup>, Althaus L. G.<sup>1,2</sup>, Wachlin F. C.<sup>1,2</sup>

<sup>1</sup> *Instituto de Astrofísica de La Plata, UNLP-CONICET, La Plata, Paseo del Bosque s/n, B1900FWA, Argentina.*

<sup>2</sup> *Facultad de Ciencias Astronómicas y Geofísicas, UNLP, La Plata, Paseo del Bosque s/n, B1900FWA, Argentina.*

<sup>3</sup> *Max-Planck-Institut für Astrophysics, Karl Schwarzschild Strasse 1, 85748, Garching, Germany.*

Recently a new class of hot compact stars enriched in C and O have been discovered by Werner et al. (2022, MNRAS, Vol. 511, L66). These stars show astonishingly high surface abundances of C and O of about 20 per cent by mass fraction. These abundances are very similar to those observed in PG1159 stars, hinting at possible evolutionary connections.

In this work we present models for these new stars and study their further evolution into the PG1159 temperature domain. The new stars together with the proposed evolutionary scenario hints at the possibility that some PG1159 stars might be the result of close binary evolution.