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The B-star Exoplanet Abundance Study (BEAST): New Wide Orbit Companions

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While the occurrence rate of wide orbit giant planets appears to increase with stellar mass at least up through the A-type regime, radial velocity studies of evolved intermediate mass stars have not found any evidence of gas giants within a few AU around hosts above 3 M_{sun}. However, B-type main sequence stars have not yet been systematically studied in large-scale imaging surveys. The B-star Exoplanet Abundance Study (BEAST) is a direct imaging survey with the extreme adaptive optics instrument SPHERE on the ESO VLT, targeting 85 B-type stars in the young Scorpius-Centaurus (Sco-Cen) region to detect giant planets at wide separations and constrain their occurrence rate and physical properties. In this work, we describe the selection and characterization of the BEAST target sample. We also present initial results from the survey, and place them in context of demographic studies of gas giant planets as a function of orbital separation and host star mass.