Progress Report 1 – Binary Exoplanet Catalogue

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As part of my ongoing PhD research, I am currently working on the construction of a catalogue of exoplanets in binary and multiple star systems. The motivation behind this work stems from the fact that existing databases are often incomplete, outdated, or lack essential binary parameters that are crucial for theoretical modeling and simulations, especially the parameters of the binary system.

Moreover, there is no single, well-structured, and analysis-ready spreadsheet that can be directly processed using a Python script for statistical or dynamical studies.

At this stage, I have completed the compilation of systems with confirmed or candidate **P-type (circumbinary)** exoplanets. Each system has been thoroughly reviewed in the literature, and the relevant physical and orbital parameters have been manually extracted, ensuring consistency and traceability. The goal is to create a comprehensive, structured resource that can later be used to select suitable systems for simulation and stability analysis.

The next step will likely involve reaching out to the **CHEOPS Science Team (CST)**, with the help of Prof. Gazeas, to seek feedback and suggestions on how best to structure or extend the catalogue. After that, I will proceed with completing the rest of the catalogue, including the S-type exoplanets.

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