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# SMALL CIRCUMBINARY PLANETS: DO THEY EXIST AND HOW DO WE FIND THEM?

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Virtual Seminar • [YouTube Live](#)

A dozen transiting circumbinary planets have been discovered and they are all large and gaseous ( $> 3$  Earth radii). It is natural to pose the question: do small circumbinary planets exist? I will attempt to answer this in two ways. First, observationally, I will show the first results from a new search using the STANLEY algorithm, which was custom-built to account for three-body geometry and dynamics. Second, I will complement this with a theoretical study on the plausibility of small circumbinary planets, investigating whether they are imperiled by slow migration speeds through treacherous mean motion resonances.

