

Assignment Analysis

Which paper proposes a novel method to attract the attention of, and ultimately communicate with, extraterrestrial intelligence?

After reviewing the titles and topics of the four papers provided, the paper that clearly proposes a novel method aimed at attracting the attention of extraterrestrial intelligence is:

****Paper A: Transit Light-Curve Signatures of Artificial Objects****

This paper explores the concept of detecting artificial objects via their transit light-curve signatures. These objects could be deliberately constructed to produce recognizable patterns in starlight, potentially as a signal to extraterrestrial observers. This aligns directly with the objective of using a novel method to attract the attention of and communicate with extraterrestrial intelligence.

Analysis of the other papers:

- ****Paper B**** discusses the confirmation of a Saturn-like exoplanet orbiting an M Dwarf. It is focused on planetary detection and not communication.
- ****Paper C**** studies microlensing effects of free-floating planets. It relates to observational techniques in astrophysics, not interstellar communication.
- ****Paper D**** investigates how cloud variability affects atmospheric imaging of exoplanets, which is relevant to climate modeling but not signaling extraterrestrials.

Therefore, only Paper A fits the assignment's requirement.

Correct Answer: Paper A

Transit Light-Curve Signatures of Artificial Objects