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It's just a phase: high-contrast imaging with patterned liquid-crystal phase plates to facilitate characterization of exoplanets

Doelman, D.S.

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Author: Doelman, D.S.

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1. Liquid-crystal coronagraphs can be easily adapted to deliver good coronagraphic performance in any ground-based high-contrast imaging system.
(Chapter 2-4)
2. The combination of an achromatic liquid-crystal coronagraph with an integral field spectrograph is a powerful tool to characterize exoplanets.
(Chapter 3)
3. The use of multiple polarization gratings in liquid-crystal coronagraphs suppresses the on-axis polarization leakage by orders of magnitude, drastically improving their broadband performance.
(Chapter 4)
4. Holographic aperture masking increases the throughput of aperture masks while keeping their simplicity, in addition to enabling the measurement of wavelength-dependent closure phases.
(Chapter 5&6)
5. The vector-Zernike wavefront sensor can measure phase and amplitude aberrations simultaneously.
(Chapter 7)
6. It should become standard practice for astronomers in the same field to peer review each other's data reduction codes.
7. While research becomes ever more specialized, researchers are becoming a new type of homo universalis.
8. Instrumentation groups focusing only on concept development and proof-of-principle diminish the impact of the groups on astrophysical research.
9. The use of phase masks is directly correlated to the understanding of coronagraphs.
10. The use of face masks is directly correlated to the understanding of Corona graphs.
11. A lesser known advantage of being an identical twin is the availability of spare organs.
12. It is more efficient to prepare lunch during the lunch break than preparing it at home.
13. When fact and fiction are interleaved, fake news is conceived, received, and believed, the truth is misperceived, the public is being deceived, and no progress will be achieved.