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Novel approaches for direct exoplanet imaging: Theory, simulations and experiments

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Cover Page



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Cover design: the designed pupil-plane masks for (left) an apodizing phase plate coronagraph with an annular dark zone for the SCExAO/Subaru instrument, and (right) an apodized-pupil Lyot coronagraph for the LUVOIR-A telescope. Both masks were optimized using algorithms developed during my PhD.

Keywords: coronagraph, wavefront sensing, optimization, Python

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To Mom and Dad,
for without your advice,
your patience,
and your love,
I would not be who I am today.

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