SAG 22: A Target Star Archive for Exoplanet Science

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Current/Upcoming NASA and ESA Exoplanet Missions

- Nancy Grace Roman Space Telescope (2021)

Future Missions:
- PLAnetary Transits and Oscillations of stars (PLATO) (2025)
- Atmospheric Remote-sensing Infrared Exoplanet Large-survey (ARIEL) (2026)

Contributions:
- Contribution to ARIEL Spectroscopy of Exoplanets (CASE) (2028)
SAG 22 Activities

NASA exoplanet missions need reliable data on target stars

• Define the parameters of a set of high priority stars for upcoming NASA missions
• Survey the scientific community to determine key science use cases
• What stellar catalogs exist, and what are their limitations and degrees of completeness?
• Identify ideal user interfaces and access options for an archive
## Missions Examined

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<th>Planned NASA</th>
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<td>• Pandora</td>
<td>• UV-SCOPE</td>
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<td>• ARIEL / CASE</td>
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<td>• Carmenes, MAROON-X, ESPRESSO, CPS, GPI, SPHERE</td>
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<td>• JWST</td>
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Merged Target Lists
SAG 22 Next Steps

• Final report writing: June through July
• End of July: Circulate report for comments
• Beginning of August: Submit report
  • Possibly revise this date depending on release of Decadal report