

# Johan MAZOYER

Research Interests: Optical Instrumentation, Direct Imaging & Coronagraphy, Observation & Characterization of Extrasolar Systems, Debris Disks

## 1 RESEARCH POSITIONS

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CNRS Scientist – <b>LESIA/Paris Observatory</b> (France)	Since 2020
Sagan Fellow – <b>Jet Propulsion Laboratory</b> (Pasadena, CA)	2018 - 2019
Postdoc – <b>Johns Hopkins University</b> (Baltimore, MD)	2016 - 2018
Postdoc – <b>Space Telescope Science Institute</b> (Baltimore, MD)	2014 - 2016
Graduate Student – <b>LESIA/Paris Observatory</b> (France)	2011 - 2014

## 2 EDUCATION

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PhD – Astronomy & Astrophysics – <b>Université Paris Diderot</b> (France) <i>Thesis: High-Contrast Direct Imaging Of Exoplanets And Circumstellar Disks</i>	2014
Master – Astrophysics – <b>Université Paul Sabatier</b> (Toulouse, France) <i>Thesis: Influence of Mars atmosphere on the ChemCam abundance detection limits</i>	2011
Diplôme Ingénieur – Space Engineering – <b>ISAE Supaero</b> (Toulouse, France)	2011
Diplôme Ingénieur – Computer Science – <b>Ecole polytechnique</b> (Paris, France)	2010

## 3 GRANTS & AWARDS

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Carl Sagan Fellowship ( <b>NASA Hubble Fellowship Program</b> ) – 3 yrs	2018
Cover of <b>Astronomy &amp; Astrophysics Journal</b> ( <b>Volume 564</b> )	2014
Outstanding Presentation Award (CNES fellow symposium JC <sup>2</sup> )	2013
CNES Doctoral Research Fellowship ( <b>French space agency</b> ) – 3 yrs	2011

## 4 ACCEPTED OBSERVATION PROPOSALS (PI)

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### GEMINI/GPI

- GS-2020A-Q-214 “Scattering properties of two newly imaged Sco-Cen Disks”
- GS-2019A-FT-112 “Do HD 1172 14 and HR 4796 show similar scattering properties?”

## 5 OUTREACH

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**Podcast Science:** I am running **PodcastScience.fm**, a general science program, airing every Wednesdays, in french. This podcast is listened by 10'000 to 30'000 listeners. Podcast Science received the Golden blog award for best scientific blog in 2012.

**Public talks:** CERN & Palais de la découverte (Paris)

## 6 PROFESSIONAL ACTIVITIES & SERVICE

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### Conference and Workshop Organizer:

- Organizer and SOC: **National Capital Area Disks** workshop (Baltimore, MD, Oct. 2018) - [website](#)
- Organizer and SOC: **Optimal Optical Coronagraphs** workshop (Leiden, NL, Sep. 2017) - [website](#)
- Organization of the “**Exoplanet Star and Planet Formation**” (**ESPF**) seminar at STScI each week (2016-2018) - [website](#)
- SOC: **High Contrast Imaging from Space** (Baltimore, MD, Nov. 2016) - [website](#)
- LOC: Workshop **très haute dynamique** (Paris, 2012)

### Other Services:

- Habitable Exoplanet Observatory (**HabEx**): **Contributing Scientist**
- Large UV Optical Infrared Surveyor (**LUVOIR**): **Contributing Scientist**
- IAU Junior member (since 2019)
- **Hubble Telescope Allocation Committee** panel support (2016).
- NASA Exoplanet Exploration Program Analysis Group (ExoPAG) member of the **Study Analysis Groups (SAGs) #19** (Theory and Rigorous Contrast Metrics).
- **Referee** for publications in the *AJ*, *A&A*, *MNRAS*, *PASP* and *JATIS*.

## 7 TEACHING & MENTORING

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### PhD supervising (co-advisor):

- **Lucie Leboulleux**, now PostDoc in Paris Observatory.
- **Kevin Fogarty**, now Caltech Prize Postdoctoral Fellow in Experimental Astrophysics.

### Teaching assistant:

Université Paris Diderot – Paris 7	Electronics	2013 - 2014
Université Paris Descartes – Paris 5	Fluid dynamics	2011 - 2012

**La Main à la Pâte:** **2007 - 2008**

I taught science during 8 months (30h/week) in primary schools in underprivileged neighborhoods (Perpignan, Fr) for the **La Main à la pâte** organization.

## 8 SELECTED PUBLICATIONS ( 60 TOTAL, 7 in first author)

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1. Chen, C. ; **Mazoyer, J.** ; Poteet, C. A., Ren, B. et al. (2020), *Multi-Band GPI Imaging of the HR 4796A Debris Disk*, The Astrophysical Journal (Accepted, In press)
2. **Mazoyer, J.** ; Pueyo, L. ; N'Diaye, M. et al. (2018), *Active Correction of Aperture Discontinuities-Optimized Stroke Minimization. II. Optimization for Future Missions*, The Astronomical Journal, 155, 8, [ADS Link](#)
3. **Mazoyer, J.** ; Boccaletti, A. ; Choquet, É. et al. (2016), *A Symmetric Inner Cavity in the HD 141569A Circumstellar Disk*, The Astrophysical Journal, 818, 150, [ADS Link](#)
4. **Mazoyer, J.** ; Boccaletti, A. ; Augereau, J. -C. et al. (2014), *Is the HD 15115 inner disk really asymmetrical?*, Astronomy and Astrophysics, 569, A29, [ADS Link](#)
5. **Mazoyer, J.** ; Baudoz, P. ; Galicher, R. et al. (2013), *Estimation and correction of wavefront aberrations using the self-coherent camera: laboratory results*, Astronomy and Astrophysics, 557, A9, [ADS Link](#)