# CLÉMENCE FONTANIVE

## **CSH Research Fellow**

University of Bern, Switzerland

clemence.fontanive@unibe.ch www.clemencefontanive.com +41 31 631 33 13

## SUMMARY OF PUBLICATION RECORD

- **Published Refereed Journal Papers: 6 first-author**, 4 second-author, 17 others (+2 submitted)
- **504 Citations in total,** 95 to first-author publications, h-index: 12
- 45 Abstracts on SAO / NASA Astrophysical Data System (ADS)

## LIST OF REFEREED PUBLICATIONS

### FIRST-AUTHOR PUBLICATIONS

1. Fontanive C. & Bardalez Gagliuffi D. FrASS, 8, 16. Mar 2021

The Census of Exoplanets in Visual Binaries: population trends from a volume-limited Gaia DR2 and literature search.

- 2. Fontanive C., Bedin L. & Bardalez Gagliuffi D. MNRAS, 501, 911. Feb 2021
  - The Y dwarf population with HST: unlocking the secrets of our coolest neighbors I. Overview and first results.
- 3. **Fontanive C.**, Allers K., Pantoja B., Biller B., Dubber S. et al. ApJL, 905, 14. Dec 2020
  - A wide planetary-mass companion to a young low-mass brown dwarf in Ophiuchus.
- 4. **Fontanive C.**, Muzic K., Bonavita M. & Biller B. MNRAS, 490, 1120. Nov 2019
  - A New Method for Target Selection in Direct Imaging Programs with COPAINS.
- 5. **Fontanive C.**, Rice K., Bonavita M., Lopez E., Muzic K. et al. MNRAS, 485, 4967. Jun 2019 A high binary fraction for the most massive close-in giant planets and brown dwarf desert members.
- 6. Fontanive C., Biller B., Bonavita M. & Allers K. MNRAS, 479, 2702. Sep 2018

Constraining the multiplicity statistics of the coolest brown dwarfs: binary fraction continues to decrease with spectral type.

#### MAIN CONTRIBUTIONS

- 1. Dubber S., Biller B., Bonavita M., Allers K., **Fontanive C.** et al. MNRAS, in review
  - An optimized survey strategy for the ERIS/NIX imager: searching for young giant exoplanets and very low mass brown dwarfs using the K-peak custom photometric filter.
- 2. Cadman J., Hall C., **Fontanive C.** & Rice K. MNRAS, 511, 457. Mar 2022
  - Binary Companions triggering fragmentation in self-gravitating discs.
- 3. Dubber S., Biller B., Allers K., Jose J., Albert L., Pantoja B, **Fontanive C.** et al. MNRAS, 505, 4215. Aug 2021 A Novel Survey for Young Substellar Objects with the W-band filter III: Searching for very low-mass brown dwarfs in Serpens South and Serpens Core.
- 4. Vigan A., **Fontanive C.**, Meyer M., Biller B., Bonavita M. et al. <u>A&A</u>, 651, 72. Jul 2021
  - The SPHERE infrared survey for exoplanets (SHINE) III. The demographics of young giant exoplanets below 300 au with SPHERE.

- 5. Mesa D., Marino S., Bonavita M., Lazzoni C., **Fontanive C.** et al. MNRAS, 503, 1276. Feb 2021 *Limits on the presence of planets in systems with debris disks: HD 92945 and HD 107146.*
- 6. Hagelberg J., Engler N., **Fontanive C.**, Daemgen S., Quanz S. et al. <u>A&A</u>, 643, 98. Nov 2020 VIBES: VIsual Binary Exoplanet survey with SPHERE Upper limits on wide S-planet and S-BD frequencies, triple system discovery, and astrometric confirmation of 20 stellar binaries.
- 7. Lazzoni C., Zurlo A., Desidera S., Mesa D., **Fontanive C.** et al. <u>A&A</u>, 641, 131. Sep 2020

  The search for disks or planetary objects around directly imaged companions: a candidate around DH Tau B.
- 8. Bonavita M., **Fontanive C.**, Desidera S., D'Orazi V., Zurlo A. et al. MNRAS, 494, 3481. May 2020 A new white dwarf companion around the  $\Delta\mu$  star GJ 3346.
- 9. Bedin L. & **Fontanive C.** MNRAS, 494, 2068. Mar 2020 Extending Gaia DR2 with HST narrow-field astrometry – II. Refining the method on WISE J163940.83–684738.6.
- 10. Claudi R., Maire A.-L., Mesa D., Cheetham A., **Fontanive C.** et al. <u>A&A</u>, 622, A96. Feb 2019 SPHERE dynamical and spectroscopic characterization of HD 142527B.
- 11. Bedin L. & **Fontanive C.** MNRAS, 481, 5339. Sep 2018

  Extending Gaia DR2 with HST narrow-field astrometry: the WISE J154151.65—225024.9 test case.
- 12. Bonavita M., D'Orazi V., Mesa D., **Fontanive C.**, Desidera S. et al. <u>A&A</u>, 608, 106. Jul 2017 *Orbiting a binary: SPHERE characterisation of the HD 284149 system.*

#### OTHER PAPERS

- 1. Langlois M., Gratton R., Lagrange A.-M. & others including **Fontanive C.** <u>A&A</u>, 651, 71. Jul 2021

  The SPHERE infrared survey for exoplanets (SHINE) II. Observations, Data reduction and analysis, Detection performances and early-results.
- 2. Desidera S., Chauvin G., Bonavita M. & others including **Fontanive C.** A&A, 651, 70. Jul 2021 The SPHERE infrared survey for exoplanets (SHINE) – I. Sample definition and target characterization.
- 3. Bonavita M., Gratton R., Desidera S. & others including **Fontanive C.** A&A, in press. 2021 *New binaries from the SHINE survey.*
- 4. Gratton R., D'Orazi V., Pacheco T. & others including **Fontanive C.** <u>A&A</u>, 646, 61. Feb 2021 *Investigating three Sirius-like systems with SPHERE.*
- 5. Maire A.-L., Rodet L., Cantalloube F. & others including **Fontanive C.** <u>A&A</u>, 624, 118. Apr 2019 *Hint of curvature in the orbital motion of the exoplanet 51 Eri b using 3 yr of VLT/SPHERE monitoring.*
- 6. Lagrange A.-M., Boccaletti A., Langlois M. & others including **Fontanive C.** <u>A&A</u>, 621, 8. Jan 2019 beta Pictoris b post conjunction detection with VLT/SPHERE.
- 7. Sissa E., Gratton R., Garufi A. & others including **Fontanive C.** <u>A&A</u>, 619, 160. Nov 2018 *High-Contrast study of the candidate planets and protoplanetary disk around HD 100546.*
- 8. Chauvin G., Gratton R., Bonnefoy M. & others including **Fontanive C.** A&A, 617, 76. Sep 2018 *Investigating the young solar system analog HD 95086. A combined HARPS and SPHERE exploration.*
- 9. Benisty M., Stolker T., Pohl A. & others including **Fontanive C.** A&A, 597, 42. Jan 2017 *Shadows and spirals in the protoplanetary disk HD 100453.*