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née le 28/06/1982 (34 ans) à Talence (France)  
1 enfant (2 ans)

**Isabelle Boisse**  
Astronome-adjoint  
Laboratoire d'Astrophysique de Marseille

## THEMES DE RECHERCHE

**Planètes extrasolaires** : détection, caractérisation

**Activité stellaire** (chromosphérique, photosphérique) : observation, simulation, en spectroscopie et photométrie

**Spectroscopie à haute-résolution** : observation, instrumentation, analyse de données

## EXPERIENCE

- jan. 2014 - ... : **Astronome-Adjoint** dans le groupe Systèmes Planétaires au Laboratoire d'Astrophysique de Marseille (LAM), Marseille, France
- oct. 2010 - dec. 2013 : **Post-doctorat** avec N.C. Santos au Centro de Astrofísica da Universidade do Porto (CAUP), Porto, Portugal
- sept. 2007- sept. 2010 : **Thèse de doctorat** : *Diagnostics de spectroscopie Doppler pour la recherche et la caractérisation des exoplanètes* avec F. Bouchy et G. Hébrard, à l'Institut d'Astrophysique de Paris (IAP), Paris, France  
**Moniteur** (TD, TP, colles) en physique, niveau L1 et L2 à l'Université Pierre & Marie Curie, Paris, France, 64 heures (equiv. TD) /an (3 ans)
- avril - juin 2007 : **Stage de recherche** : *Caractérisation de la métallicité et de l'activité stellaire pour la recherche d'exoplanètes avec le spectrographe SOPHIE* avec F. Bouchy et G. Hébrard, IAP, Paris, France
- avril - juillet 2006 : **Stage de recherche** : *Les arcs de Neptune - Analyse d'images d'optique adaptative* avec C. Dumas, ESO Santiago, Chile, et B. Sicardy, LESIA, Observatoire de Meudon, France (séjour de 4 mois à l'ESO-Santiago)
- mai - juin 2005 : **Stage de recherche** : *Recherche des sources des rayons cosmiques d'ultra-haute énergie* avec G. Sigl, IAP, Paris, France

## FORMATION

- 2011** : **Qualification** aux fonctions de maître de conférence pour la section 34 (Astronomie-Astrophysique)
- 2010** : **Thèse** en Astronomie-Astrophysique, au sein de l'Institut d'Astrophysique de Paris, CNRS/UMR7095, Université Pierre & Marie Curie (Paris 6), mention très honorable
- 2007** : **Master 2 Recherche** Astronomie-Astrophysique mention Bien, Université Pierre & Marie Curie, Paris, France
- 2006** : **Master 1** en Physique mention Bien, Ecole Normale Supérieure de Cachan et Université Pierre & Marie Curie, Paris, France
- 2005** : **Licence** de Science spécialité Physique mention Assez Bien, Ecole Normale Supérieure de Cachan et Université Pierre & Marie Curie, Paris, France

## **PUBLICATIONS, COMMUNICATIONS & ACTIVITE DE RAPPORTEUR**

- Publications dans les journaux internationaux avec comité de lecture : 86 articles acceptés dont 7 en premier auteur, 2 articles en premier auteur en cours de soumission  
h-index: 27; nombre de citations par article : 130 moyennées sur les 6 premiers articles, 28 moyennées sur tous les articles publiés, 49 moyennées sur les 7 articles en premier auteur
- 18 contributions orales dans des conférences internationales avec comités de lecture dont 7 invitées
- Referee pour allocation de temps de télescope ESO Panel C pour P98 (2016B), P99 (2017A), P100 (2017B)
- Paneliste pour la NSF (National Science Fondation) en 2011
- Rapporteur pour A&A, ApJ, AJ, MNRAS, PASP

## **GESTION D'EQUIPES & DE PROJETS, COLLABORATIONS**

- 2016- ... : PI du Consortium SOPHIE et responsable technique de l'instrument
- 2016- ... : Co-I de NIRPS (spectrographe dans le nIR pour le 3.6m, LaSilla, ESO) - Core Science Team
- 2014- ... : Représentant français pour le spectrographe HIRES@E-ELT - Membre du Board
- 2012- ... : Collaborateur PLATO (M3 Cosmic vision ESA)
- 2010- ... : Co-I de SPIRou [<http://lamwws.oamp.fr/magics/spirou/FrontPage>] - core science team
- 2010- ... : Co-I du programme de recherche de planètes autour d'étoiles déficientes avec HARPS
- 2010- ... : Co-I de HATNet, avec Tel-Aviv co-I CNOUS, puis avec Princeton et Konkoli
- 2007- ... : Co-I du Consortium SOPHIE
- 2007-2010 : Co-I du projet SuperWASP
- 2007-2010 : Co-I du projet Super-terres ANR Jeunes Chercheurs (PI : F. Bouchy)
- 2007-2010 : Co-PI de deux des cinq sous-programmes de recherche de planètes du Consortium SOPHIE

## **PRIX ET BOURSES**

- 2015 : co-PI des 225 000 euros de la fondation A\*MIDEX pour de l'achat matériel pour SPIRou
- 2013-2015 : 8000 euros de Bourse Campus France PHC-Pessoa pour des échanges entre le LAM (Marseille) et CAUP (Porto)
- 2014 : 2000 euros de prix de la Mairie Marseille
- 2014 : 9000 euros du LAM pour acheter des équipements pour SPIRou
- 2008-2012 : Plusieurs bourses reçues pour participer à des conférences
- 2011 : 1000 euros d'aide de l'Université de Porto pour l'organisation d'un workshop au CAUP

## **ACTIVITES ADMINISTRATIVES & D'ORGANISATION**

- Membre du Conseil Scientifique du LAM 2016-2020
- Membre du Conseil Scientifique du Programme National de Planétologie (PNP) 2014-2018
- Membre invité du Conseil Scientifique du Télescope d'1.93m de l'OHP depuis 2014
- Co-responsable de la communication scientifique au sein du Groupe Sciences Planétaires du LAM
- Membre du SOC du SPIRou Science Meeting 2016
- Chair du SOC et membre du LOC de la conférence internationale de l'OHP 2015: Twenty years of giant exoplanets
- Co-organisatrice de la Session Parallèle "Portraying the Hosts" au Cool Stars 18, USA 2014  
<https://sites.google.com/site/portrayingthehostscs18/>
- Membre du Conseil Scientifique du CAUP 2010-2013
- Organisatrice du Planet Journal Club au CAUP 2010-2013

- Organisatrice du Workshop on Dynamics of extrasolar planets au CAUP en 2011  
<http://www.astro.up.pt/investigacao/conferencias/dynamic2011>
- Membre du Conseil Administratif de l'OSU-IAP 2008-2010 (représentant des doctorants)
- Membre du Conseil du Laboratoire de l'IAP 2008-2009 (représentant des doctorants de l'IAP)
- Organisatrice de la Journée des thèses de l'IAP en 2008

## ENCADREMENT

- 2016-2019 : Etudiante en thèse, Melissa Hobson *Optimize exoplanets detection around M stars with nIR spectrographs* at LAM, F. Bouchy est co-superviseur en tant qu'HDR
- 2011- 2013 : Contribue à l'encadrement des doctorants de l'équipe exoplanètes du CAUP, particulièrement avec M. Oshagh à propos des simulations de l'impact de l'activité stellaire sur les mesures de transits planétaires.

Stages de master :

- 2017 : stage de M2 (4 mois) de Théo Lopez au LAM
- 2016 : stage de M1 (2 mois) de Axel Guedj *Caractérisation de l'activité stellaire et recherche de planètes autour de Iota Hor* at LAM
- 2016 : stage de M1 (2 mois) de Vatsal Panwar *Analysing the stellar activity impact on RV measurements of HD207832, HD125881, HD 148303 and HD209100* au LAM
- 2015 : stage de M1 (3.5 mois) d'Orion Girault *Caractérisation de l'activité stellaire pour la recherche d'exoplanètes avec le spectrographe SOPHIE* au LAM
- 2014 : Encadrement du stage de M2 (5 mois) de Wissam Fakhardji *Mesure de la vitesse radiale d'un système binaire détecté par microlentille* au LAM
- 2010 : Co-encadrement du stage de M1 (3 mois) de Steven Lequeux *Transit spectroscopique de planètes extrasolaires* avec A. Lecavelier des Etangs à l'IAP
- 2007-2010 : Formation d'étudiants en master 2 et aide aux observations sur le spectrographe SOPHIE

## COMMUNICATION AVEC LE PUBLIC

Plusieurs interventions dans les structures scolaires pour favoriser la place des femmes en science  
Participation au souk des sciences Marseille dans le cadre du printemps des chercheurs en 2014  
Interventions journalistiques pour le suivi de grandes découvertes sur les exoplanètes  
Conférences grand public à Lisbonne en 2011 - 2013

## ENSEIGNEMENT

- 2014 - ... : 66h eq. TD - Université d'Aix-Marseille  
: IUT Optique géométrique  
: L1 Informatique  
: M1 Formation aux observations astronomique - caractérisation détecteur CCD  
: M2 Projet d'Astronomie
- 2007 - 2010 : 64h eq. TD - Université Pierre et Marie Curie, Paris  
: L1 L2 Physique pour la biologie

## LANGUES & COMPETENCES

Français, langue maternelle  
Anglais courant

Bon niveau d'espagnol  
Bonnes notions de portugais

**Systèmes d'exploitation** : Unix, Linux, Mac, Windows

**Langages de programmation** : Python, SuperMongo, FORTRAN, IDL, C

## LOISIRS

Juge pour le prix littéraire de l'ENS 2006

Théâtre avec Les productions de la Fabrique jusqu'en 2007 (plus d'une centaine de représentations en public, Avignon off 2006)

Clown avec Fred Robbes 2007-2011 (improvisation et représentations publiques)

Danse (africain, contemporain, improvisation, flamenco) en cours

## 5 publications significatives

### "Stellar activity of planetary host star HD189733"

I. Boisse, C. Moutou, A. Vidal-Madjar, F. Bouchy, F. Pont et al. 2009, A&A, 495, 959

### "Disentangling between stellar activity and planetary signals"

I. Boisse, F. Bouchy, G. Hébrard, X. Bonfils, N. Santos and S. Vauclair 2011, A&A, 528A, 4B

### "The SOPHIE search for northern extrasolar planets V. Follow-up of ELODIE candidates: Jupiter-analogs around Sun-like stars"

I. Boisse, F. Pepe, C. Perrier, D. Queloz, X. Bonfils et al. 2012, A&A, 545, 55

### "SOAP A tool for the fast computation of photometry and radial velocity induced by stellar spots"

I. Boisse, X. Bonfils and N.C. Santos 2012, A&A, 545, 109

### "The first radial velocity measurements of a microlensing event: no evidence for the predicted binary"

I. Boisse, A. Santerne, J.-P. Beaulieu, W. Fakhardji, N.C. Santos et al. 2015, A&A, 582, 11

## 1 Liste des publications

### PUBLICATIONS A COMITE DE LECTURE

#### [A.1] "Refined parameters and spectroscopic transit of the super-massive planet HD 147506b"

Loeillet, B.; Shporer, A.; Bouchy, F.; Pont, F.; Mazeh, T. A&A, Volume 481, Issue 2, 2008, pp.529-533

#### [A.2] "ELODIE metallicity-biased search for transiting Hot Jupiters. V. An intermediate-period Jovian planet orbiting HD 45652"

Santos, N. C.; Udry, S.; Bouchy, F.; da Silva, R.; Loeillet, B. et al. A&A, Volume 487, Issue 1, 2008, pp.369-372

#### [A.3] "Misaligned spin-orbit in the XO-3 planetary system ?"

Hébrard, G.; Bouchy, F.; Pont, F.; Loeillet, B.; Rabus, M. et al. A&A, Volume 488, Issue 2, 2008, pp.763-770

#### [A.4] "Stellar activity of planetary host star HD189733"

**Boisse, I.**; Moutou, C.; Vidal-Madjar, A.; Bouchy, F.; Pont, F. et al. A&A, Volume 495, Issue 3, 2009, pp.959-966

#### [A.5] "Photometric and spectroscopic detection of the primary transit of the 111-day-period planet HD80606b"

Moutou, C.; Hébrard, G.; Bouchy, F.; Eggenberger, A.; **Boisse, I.** et al. A&A, Volume 498, Issue 1, 2009, pp.L5-L8

#### [A.6] "Spin-orbit misalignment in the HD 80606 planetary system"

Pont, F.; Hébrard, G.; Irwin, J. M.; Bouchy, F.; Moutou, C. et al. A&A, Volume 502, Issue 2, 2009, pp.695-703

#### [A.7] "The SOPHIE search for northern extrasolar planets. I. A companion around HD16760 with mass close to the planet/brown-dwarf transition"

Bouchy, F.; Hébrard, G.; Udry, S.; Delfosse, X.; **Boisse, I.** et al. A&A, Volume 505, 2009, pp.853-858

[A.8] "*Extrasolar planets and brown dwarfs around A-F type stars - VII. Theta Cygni radial velocity variations: planets or stellar phenomenon ?*"

Desort, M.; Lagrange, A.-M.; Galland, F.; Udry, S.; Montagnier, G. et al. A&A, Volume 506, 2009, pp.1469-1476

[A.9] "*The SOPHIE search for northern extrasolar planets. II. A multiple planet system around HD 9446*"

G. Hébrard, X. Bonfils, D. Ségransan, C. Moutou, X. Delfosse et al. 2010, A&A, 513, p.69

[A.10] "*Observation of the full 12-hour-long transit of the exoplanet HD 80606b. Warm-Spitzer photometry and SOPHIE spectroscopy*"

G. Hébrard, J.-M. Désert, R.F. Díaz, **I. Boisse**, F. Bouchy, A. et al. 2010, A&A, 516, p.95

[A.11] "*The spin-orbit alignment of the transiting exoplanet WASP-3b from Rossiter-McLaughlin observations*"

E.K. Simpson, D. Pollacco, G. Hébrard, N.P. Gibson, S.C.C. Barros et al. Mon. Not. R. Astron. Soc., Volume 405, pp.1867-1872 (2010)

[A.12] "*WASP-21b: a hot-Saturn exoplanet transiting a thick disc star*"

F. Bouchy, L. Hebb, I. Skillen, A. Collier Cameron, B. Smalley et al. A&A, Volume 519, pp.98-103 (2010)

[A.13] "*The HARPS search for southern extrasolar planets.XXIII. 8 planetary companions to low-activity solar-type stars*"

D. Naef, M. Mayor, G. Lo Curto, F. Bouchy, C. Lovis et al. A&A, vol. 523, pp.A15-22 (2010)

[A.14] "*The Earth as an extrasolar transiting planet. Earth's atmospheric composition and thickness revealed by Lunar eclipse observations*"

A. Vidal-Madjar, L. Arnold, D. Ehrenreich, R. Ferlet, A. Lecavelier des Etangs et al. A&A, vol. 523, pp.A57-70 (2010)

[A.15] "*The Doppler shadow of WASP-3b. A tomographic analysis of Rossiter-McLaughlin observations*"

G.R.M. Miller, A. Collier Cameron, E.K. Simpson, D. Pollacco, B. Enoch et al. A&A, vol. 523, pp.A52-58 (2010)

[A.16] "*The SOPHIE search for northern extrasolar planets. III. A Jupiter-mass companion around HD 109246*"

**I. Boisse**, A. Eggenberger, N. Santos, F. Bouchy, C. Lovis et al. A&A, vol. 523, pp.88-96 (2010)

[A.17] "*WASP-38b: a transiting exoplanet in an eccentric, 6.87d period orbit*"

S.C.C. Barros, F. Faedi, A. Collier Cameron, T.A. Lister, J. McCormac et al. A&A, Volume 525, pp.54-59 (2011)

[A.18] "*SOPHIE velocimetry of Kepler transit candidates. I. Detection of the low-mass white dwarf KOI 74b.*"

Ehrenreich, D.; Lagrange, A.-M.; Bouchy, F.; Perrier, C.; Hébrard, G. et al. A&A, Volume 525, 2011, pp.85-92

[A.19] "*WASP-37b: A 1.8 M<sub>J</sub> Exoplanet Transiting a Metal-poor Star*"

E.K. Simpson, F. Faedi S.C.C. Barros, D.J.A. Brown, A. Collier Cameron et al. 2011, AJ, 141, 8S

[A.20] "*Disentangling between stellar activity and planetary signals*"

**I. Boisse**, F. Bouchy, G. Hébrard, X. Bonfils, N. Santos and S. Vauclair 2011, A&A, 528A, 4B

- [A.21] "The upper atmosphere of the exoplanet HD209458b revealed by the sodium D lines. Temperature-pressure profile, ionization layer, and thermosphere"  
A. Vidal-Madjar, D.K. Sing, A. Lecavelier des Etangs, R. Ferlet, J.-M. Désert et al. 2011, A&A, 527A, 110V
- [A.22] "The retrograde orbit of the HAT-P-6b exoplanet"  
G. Hébrard, D. Ehrenreich, F. Bouchy, X. Delfosse, C. Moutou et al. 2011, A&A letter, 527L, 11H
- [A.23] "A short-period super-Earth orbiting the M2.5 dwarf GJ3634. Detection with HARPS velocimetry and transit search with Spitzer photometry"  
X. Bonfils, M. Gillon, T. Forveille, X. Delfosse, D. Deming et al. 2011, A&A, 528A, 111B
- [A.24] "Exoplanets transmission spectroscopy: accounting for the eccentricity and the longitude of periastron. Superwinds in the upper atmosphere of HD209458b ?"  
M. Montalto, N.C. Santos, **I. Boisse**, G. Boué, P. Figueira and S. Sousa 2011, A&A letter, 528L, 17M
- [A.25] "Independent discovery of the transiting exoplanet HAT-P-14b"  
E.K. Simpson, S.C.C. Barros, D.J.A. Brown, A. Collier Cameron, D. Pollacco et al. 2011, AJ, 141, 161S
- [A.26] "Orbital eccentricity of WASP-12 and WASP-14 from new radial-velocity monitoring with SOPHIE"  
N. Husnoo, F. Pont, G. Hébrard, E. Simpson, T. Mazeh et al. 2011, MNRAS, 413, 2500
- [A.27] "WASP-40b: Independent discovery of the 0.6-Mjup transiting exoplanet HAT-P-27b"  
D.R. Anderson, S.C.C. Barros, **I. Boisse**, F. Bouchy, A. Collier Cameron et al., PASP, 123, 555A
- [A.28] "The spin-orbit angles of the transiting exoplanets WASP-1b, WASP-24b, WASP-38b and HAT-P-8b from Rossiter-McLaughlin observations"  
E.K. Simpson, D. Pollacco, A. Collier Cameron, G. Hébrard, D.R. Anderson et al. 2011, MNRAS, 414, 3023
- [A.29] "WASP-39b: a highly inflated Saturn-mass planet orbiting a late G-type star"  
F. Faedi, S.C.C. Barros, D.R. Anderson, D.J.A. Brown, A. Collier Cameron et al., 2011, A&A, 531A, 40F
- [A.30] "WASP-23b: a transiting hot Jupiter around a K dwarf and its Rossiter-McLaughlin effect"  
A.H.M.J. Triaud, D. Queloz, C. Hellier, M. Gillon, B. Smalley et al., 2011, A&A, 531A, 24T
- [A.31] "Deriving the radial-velocity variations induced by stellar activity from high-precision photometry. Test on HD189733 with simultaneous MOST/SOPHIE data"  
A.F. Lanza, **I. Boisse**, F. Bouchy, A.S. Bonomo, and C. Moutou, 2011, A&A, 533, 44
- [A.32] "Spin-orbit inclinations of the exoplanetary systems HAT-P-8b, HAT-P-9b, HAT-P-16b, and HAT-P-23b"  
C. Moutou, R.F. Díaz, S. Udry, G. Hébrard, F. Bouchy et al. 2011, A&A, 533, 113
- [A.33] "The SOPHIE search for northern extrasolar planets IV. Massive companions in the planet-brown dwarf boundary"  
R.F. Díaz, A. Santerne, J. Sahlmann, G. Hébrard, A. Eggenberger et al. 2012, A&A, 538, 113
- [A.34] "Rossiter-McLaughlin reflect measurements for WASP-16, WASP-25 and WASP-31"  
D.J.A. Brown, A. Collier Cameron, D.R. Anderson, B. Enoch, C. Hellier et al. 2012, MNRAS, 423, 1503

- [A.35] *"The SOPHIE search for northern extrasolar planets V. Follow-up of ELODIE candidates: Jupiter-analogs around Sun-like stars"*  
I. Boisse, F. Pepe, C. Perrier, D. Queloz, X. Bonfils et al. 2012, A&A, 545, 55
- [A.36] *"SOAP A tool for the fast computation of photometry and radial velocity induced by stellar spots"*  
I. Boisse, X. Bonfils and N.C. Santos 2012, A&A, 545, 109
- [A.37] *"Analysis of spin-orbit alignment in the WASP-32, WASP-38 and HAT-P-27/WASP-40 systems"*  
D.J.A. Brown, A. Collier Cameron, R.F. Díaz, A.P. Doyle, M. Gillon et al. 2012, ApJ, 760, 139
- [A.38] *"A new analysis of the WASP-3 system: no evidence for an additional companion"*  
M. Montalto, J. Gregorio, G. Boué, A. Mortier, I. Boisse et al. 2012, MNRAS, 427, 2757
- [A.39] *"SOAP-T: A tool to study the light-curve and radial velocity of a system with a transiting planet and a rotating spotted star"*  
M. Oshagh, I. Boisse, G. Boué, M. Montalto, N.C. Santos et al. 2013, A&A, 549, 35
- [A.40] *"New analytical expressions of the Rossiter-McLaughlin effect adapted to different observation techniques"*  
G. Boué, M. Montalto, I. Boisse, M. Oshagh and N.C. Santos, A&A, 550, 53
- [A.41] *"SOPHIE+: First results of an octagonal-section fiber for high-precision radial velocity measurements"*  
F. Bouchy, R.F. Diaz, G. Hébrard, L. Arnold, I. Boisse et al. 2013, A&A, 549, 49
- [A.42] *"HAT-P-42b and HAT-P-43b. Two transiting hot Jupiters from the HATNet survey"*  
I. Boisse, J.D. Hartman, G.A. Bakos, K. Penev, Z. Csubry et al., 2013, A&A, 558, 86
- [A.43] *"The effect of stellar spots on the high precision transit light curve"*  
M. Oshagh, N.C. Santos, I. Boisse, G. Boué, M. Montalto et al. 2013, A&A, 556, 19
- [A.44] *"Extrasolar planets and brown dwarfs around A-F type stars. VIII. A giant planet orbiting the young star HD113337"*  
S. Borgniet, I. Boisse, A.-M. Lagrange, F. Bouchy, L. Arnold et al. 2014, A&A, 561, 65
- [A.45] *"The SOPHIE search for northern extrasolar planets. VI. Three new hot Jupiters in multi-planet extrasolar systems."*  
C. Moutou, G. Hébrard, F. Bouchy, L. Arnold, N.C. Santos et al. 2014, A&A, 563, 22
- [A.46] *"HAT-P-49b: A 1.7 MJ planet transiting a bright 1.5 Msolar F-star (HD340099)."*  
A. Bieryla, J.D. Hartman, G.A. Bakos, W. Bhati, G. Kovacs et al. 2014, AJ, 147, 84
- [A.47] *"The HARPS search for southern extra-solar planets. XXXV. The interesting case of HD41248: stellar activity, no planets ?"*  
N.C. Santos, A. Mortier, J.P. Faria, X. Dumusque, V. Adibekyan et al. 2014, A&A, 566, 35
- [A.48] *"On the long-term correlation between the flux in the CaII H & K alpha lines for FGK stars."*  
J. Gomes da Silva, N.C. Santos, I. Boisse, X. Dumusque, C. Lovis 2014, A&A, 566, 66
- [A.49] *"Detecting planets around active stars: impact of magnetic fields on radial velocities and line bisectors."*  
E. Hébrard, J.-F. Donati, X. Delfosse, J. Morin, I. Boisse et al. 2014, MNRAS, 443, 2599
- [A.50] *"Improvements on analytic modelling of stellar spots"*

- M. Montalto, G. Boué, M. Oshagh, **I. Boisse**, G. Bruno et al. 2014, MNRAS, 444, 1721
- [A.51] "*SOPHIE velocimetry of Kepler transit candidates. XII. KOI-1257b: a highly-eccentric 3-month period transiting exoplanet*"  
A. Santerne, G. Hébrard, M. Deleuil, M. Havel, A. Correia et al. 2014, A&A, 571, 37
- [A.52] "*The PLATO 2.0 Mission*"  
H. Rauer, C. Catala, C. Aerts, T. Appourchaux, W. Benz et al. 2014, Experimental Astronomy, 38, 249
- [A.53] "*Modelling the magnetic activity & filtering radial velocity curves of young Suns : the weak-line T Tauri star LkCa 4*"  
J.-F. Donati, E. Hébrard, G. Hussain, C. Moutou, K. Grankin et al. 2014, MNRAS, 444, 3220
- [A.54] "*SOAP 2.0: A tool to estimate the photometric and radial velocity variations induced by stellar spots and plages*"  
X. Dumusque, **I. Boisse**, and N.C. Santos 2014, ApJ, 796, 132
- [A.55] "*The first radial velocity measurements of a microlensing event: no evidence for the predicted binary*"  
**I. Boisse**, A. Santerne, J.-P. Beaulieu, W. Fakhardji, N.C. Santos et al. 2015, A&A, 582, 11
- [A.56] "*SOPHIE velocimetry of Kepler transit candidates. XIV. A joint photometric, spectroscopic, and dynamical analysis of the Kepler-117 system*"  
G. Bruno, J. Almenara, S. Barros, A. Santerne, R. Diaz et al. 2015, A&A, 573, 124
- [A.57] "*SOPHIE velocimetry of Kepler transit candidates. XIII. KOI-614b, KOI-206b and KOI-680b: a massive warm jupiter orbiting a G0 metallic dwarf and two highly inflated planets with a distant companion around evolved F-type stars.*"  
J.M. Almenara, C. Damiani, F. Bouchy, M. Havel, G. Bruno et al. 2015, A&A, 575, 71
- [A.58] "*Evidence for a spectroscopic direct detection of reflected light from 51 Pegasi b*"  
J. Martins, N.C. Santos, P. Figuera, J. Faria, M. Montlato et al. 2015, A&A, 576, 134
- [A.59] "*SOPHIE velocimetry of Kepler transit candidates. XVI. Tomographic measurement of the low obliquity of KOI-12b, a warm Jupiter transiting a fast rotator*"  
V. Bourrier, A. Lecavelier des Etangs, G. Hébrard, A. Santerne, M. Deleuil et al. 2015, A&A, 579, 55
- [A.60] "*The SOPHIE search for northern extrasolar planets. VII. A warm Neptune orbiting HD 164595*"  
B. Courcol, F. Bouchy, F. Pepe, A. Santerne, X. Delfosse et al. 2015, A&A, 581, 38
- [A.61] "*One of the closest exoplanet pairs to the 3:2 mean motion resonance: K2-19b and c*"  
D. Armstrong, A. Santerne, V. Dimitri, S. Barros, O. Demangeon et al. 2015, A&A, 582, 33
- [A.62] "*HAT-P-55b: A Hot Jupiter Transiting a Sun-Like Star*"  
D. Juncher, L. Buchhave, J. Hartman, G. Bakos, A. Bieryla et al. 2015, PASP, 127, 851
- [A.63] "*Detecting ring systems around exoplanets using high resolution spectroscopy: the case of 51 Pegasi b*"  
N.C. Santos, J. Martins, G. Boué, A. Correia, M. Oshagh et al. 2015, A&A, 583, 50
- [A.64] "*Magnetic activity and hot Jupiters of young Suns: the weak-line T Tauri stars V819 Tau and V830 Tau*"  
J.F Donati, E. Hébrard, G. Hussain, C. Moutou, L.Malo et al. 2015, MNRAS, 453, 3706
- [A.65] "*A maximum entropy approach to detect close-in giant planets around active stars*"



- P. Petit, J.F. Donati, E. Hébrard, J. Morin, C. Folsom et al. 2015, A&A, 584, 84
- [A.66] "*HAT-P-50b, HAT-P-51b, HAT-P-52b, and HAT-P-53b: Three Transiting Hot Jupiters and a Transiting Hot Saturn From the HATNet Survey*"  
J. Hartman, W. Bhatti, G. Bakos, A. Bieryla, G. Kovacs et al. 2015, AJ, 150, 168
- [A.67] "*Photodynamical mass determination of the multiplanetary system K2-19*"  
S. Barros, J. Almenara, O. Demangeon, M. Tsantaki, A. Santerne et al. 2015, MNRAS, 454, 4267
- [A.68] "*Could a change in magnetic field geometry cause the break in the wind-activity relation?*"  
A. Vidotto, J.F. Donati, M. Jardine, V. See, P. Petit et al. 2016, MNRAS, 455, 52
- [A.69] "*SOPHIE velocimetry of Kepler transit candidates XVII. The physical properties of giant exoplanets within 400 days of period*"  
A. Santerne, C. Moutou, M. Tsantaki, F. Bouchy, G. Hébrard et al. 2016, A&A, 587, 64
- [A.70] "*The HARPS search for southern extra-solar planets. XXXIX. HD175607 b, the most metal-poor G dwarf with an orbiting sub-Neptune*"  
A. Mortier, J. Faria, N.C. Santos, V. Rajpaul, P. Figueira et al. 2016, A&A, 585, 135
- [A.71] "*The SOPHIE search for northern extrasolar planets VIII. Follow-up of ELODIE candidates: long-period brown-dwarf companions*"  
F. Bouchy, D. Ségransan, R. Diaz, T. Forveille, **I. Boisse** et al. 2016, A&A, 585, 46
- [A.72] "*The SOPHIE search for northern extrasolar planets IX. Populating the brown dwarf desert*"  
P. Wilson, G. Hébrard, N. Santos, J. Sahlmann, G. Montagnier et al. 2016, A&A, 588, 144
- [A.73] "*The SOPHIE search for northern extrasolar planets X. Detection and characterization of giant planets by the dozen*"  
G. Hébrard, L. Arnold, T. Forveille, A. Correia, J. Laskar et al. 2016, A&A, 588, 145
- [A.74] "*The HARPS search for southern extra-solar planets XL. Searching for Neptunes around metal-poor stars*"  
J. Faria, N. Santos, P. Figueira, A. Mortier, X. Dumusque, et al. 2016, A&A, 589, 25
- [A.75] "*EPIC212521166 b: a Neptune-mass planet with Earth-like density*"  
H. Osborn, A. Santerne, S. Barros, D. Armstrong, N. Santos, et al. 2016, arXiv:1605.04291
- [A.76] "*K2-29 b/WASP-152 b: An Aligned and Inflated Hot Jupiter in a Young Visual Binary*"  
A. Santerne, G. Hébrard, J. Lillo-box, D. Armstrong, S. Barros et al. 2016, ApJ, 824, 55
- [A.77] "*The SOPHIE search for northern extrasolar planets XI. Three new companions and an orbit update: Giant planets in the habitable zone*"  
R. Diaz, J. Rey, O. Demangeon, G. Hébrard, **I. Boisse** et al. 2016, A&A, 591, 146
- [A.78] "*WASP-86b and WASP-102b: super-dense versus bloated planets*"  
F. Faedi, Y. Gomez Maqueo Chew, D. Pollacco, D. Brown, G. Hébrard et al. 2016, arXiv:1608.04225
- [A.79] "*Modelling the RV jitter of early-M dwarfs using tomographic imaging*"  
E. Hébrard, J.-F. Donati, X. Delfosse, J. Morin, C. Moutou et **I. Boisse** 2016, MNRAS, 461, 1465
- [A.80] "*WASP-113b and WASP-114b, two inflated hot Jupiters with contrasting densities*"  
S. Barros, D. Brown, G. Hébrard, Y. Gomez Maqueo Chew, D. Anderson et al. 2016, A&A, 593, 113
- [A.81] "*K2-30 b and K2-34 b: Two inflated hot Jupiters around solar-type stars*"  
J. Lillo-Box, O. Demangeon, A. Santerne, S. Barros, D. Barrado et al. 2016, A&A, 594, 50

- [A.82] "Disentangling planetary and stellar activity features in the CoRoT-2 light curve"  
G. Bruno, M. Deleuil, J.-M. Almenara, S. Barros, A. Lanza et al. 2016, A&A, 595, 89
- [A.83] "Spectroscopic characterisation of microlensing events. Towards a new interpretation of OGLE-2011-BLG-0417"  
A. Santerne, J.-P. Beaulieu, B. Rojas-Ayala, **I. Boisse**, E. Schlawin et al. 2016, A&A, 595, 11
- [A.84] "HAT-P-65b and HAT-P-66b: Two Transiting Inflated Hot Jupiters and Observational Evidence for the Reinflation of Close-in Giant Planets"  
J.D. Hartman, G. Bakos, W. Bhatti, K. Penev, A. Bieryla et al. 2016, AJ, 152, 182
- [A.85] "EPIC201702477b: A Transiting Brown Dwarf from K2 in a 41 day Orbit"  
D. Bayliss, S. Hojjatpanah, A. Santerne, D. Dragomir, G. Zhou et al. 2017, AJ, 153, 15
- [A.86] "The SOPHIE search for northern extrasolar planets XII. Three giant planets suitable for astrometric mass determination with Gaia "  
J. Rey, G. Hébrard, F. Bouchy, V. Bourrier, **I. Boisse** et al. 2017, accepté par A&A, arXiv:1702.06393

## ARTICLES DE CONFERENCE et EDITION

- [C.1] "Stellar metallicity and activity study for exoplanets searches with the SOPHIE spectrograph"  
**I. Boisse**, F. Bouchy, G. Hébrard, A. Ecuillon, A. Vidal-Madjar et al. *SF2A-2007: Proceeding of the Annual meeting of the French Society of A&A held in Grenoble, France* Eds.: J. Bouvier, A. Chalabaev and C. Charbonnel, p.373, 2007
- [C.2] "Monitoring HD189733 activity during two rotation periods"  
**Boisse, I.**; Moutou, C.; Vidal-Madjar, A.; Bouchy, F.; Pont, F. et al., *Proceeding of the International Astronomical Union, IAU Symposium Transiting Planets*, Volume 253, p. 462-465, 2009
- [C.3] "Charge Transfer Inefficiency effect for high-precision radial velocity measurements"  
Bouchy, F.; Isambert, J.; Lovis, C.; **Boisse, I.**; Figueira, P.; Hébrard, G.; Pepe, F. , *EAS Publications Series*, Volume 37, 2009, pp.247-253
- [C.4] "Consequences of spectrograph illumination for the accuracy of radial-velocimetry"  
**I. Boisse**, F. Bouchy, B. Chazelas, S. Perruchot, F. Pepe, C. Lovis et G. Hébrard, *New technologies for probing the diversity of brown dwarfs and exoplanets*, EPJ Web of Conferences, arXiv:1001.0794
- [C.5] "Search and characterization for extrasolar planets with the SOPHIE consortium"  
**I. Boisse**, F. Bouchy, G. Hébrard, S. Udry, X. Delfosse et al. *SF2A-2010: Proceeding of the Annual meeting of the French Society of A&A held in Marseille, France*
- [C.6] "Disentangle stellar activity and planetary signals"  
**I. Boisse**, F. Bouchy, G. Hébrard, X. Bonfils, N. Santos and S. Vauclair, *Proceeding of the International Astronomical Union, IAU Symposium, Physics of Sun and Star Spots*, Volume 273, 2010
- [C.7] "Disentangle stellar activity and planetary signals"  
**I. Boisse**, F. Bouchy, G. Hébrard, X. Bonfils, N. Santos and S. Vauclair, *Detection and Dynamics of Transiting Exoplanets, Proceeding of Haute Provence Observatory Colloquium (23-27 August 2010)*, Eds.: F. Bouchy, R.F. Díaz & C. Moutou
- [C.8] "Disentangle stellar activity and planetary signals"  
**I. Boisse**, F. Bouchy, G. Hébrard, X. Bonfils, N. Santos and S. Vauclair, *Proceeding of the International Astronomical Union, IAU Symposium, The Astrophysics of Planetary Systems: Formation, Structure, and Dynamical Evolution*, Eds.: A. Sozzetti, M.G. Lattanzi & A.P. Boss, Volume 276, 2010
- [C.9] "Three new massive companions in the planet-brown dwarf boundary detected with SOPHIE"  
R.F. Díaz, G. Hébrard, F. Bouchy, **I. Boisse**, X. Bonfils et al., *Detection and Dynamics of Transiting Exoplanets, Proceeding of Haute Provence Observatory Colloquium (23-27 August 2010)*, Eds.: F. Bouchy, R.F. Díaz & C. Moutou
- [C.10] "Higher-precision radial velocity measurements with the SOPHIE spectrograph using octogonal-section fibers"  
S. Perruchot, F. Bouchy, B. Chazelas, R.F. Díaz, G. Hébrard et al. 2011, SPIE, 8151, 8151115-8151115-12

- [C.11] "SOAP: a tool for the fast computation of the effect of stellar spots"  
**I. Boisse**, X. Bonfils, N.C. Santos and P. Figueira, New Quests in Stellar Astrophysics. III. A Panchromatic view of solar-like stars, with and without planets, Puerto Vallarta, Mexico
- [C.12] "Towards the detection of other Earths: dealing with stellar noise"  
 N.C. Santos, **I. Boisse**, M. Oshagh, X. Bonfils, X. Dumusque et al. AN, 2012, proceedings of the Cool stars conference, Barcelona, Spain
- [C.13] "The SOPHIE search for northern extrasolar planets. Follow-up of ELODIE candidates: Jupiter-analogs around Sun-like stars"  
**I. Boisse**, F. Pepe, C. Perrier et al. SF2A, Nice, France, 2012
- [C.14] "SPIRou @ CFHT: data reduction software and simulation tools"  
 E. Artigau, F. Bouchy, X. Delfosse et al. Software and Cyberinfrastructure for Astronomy II. Proceedings of the SPIE, Volume 8451, id. 84513I-84513I-9 (2012)
- [C.15] "How the planetary research helps to the stellar dynamo understanding"  
**I. Boisse**, M. Oshagh, C. Lovis et al. SF2A, Nice, France, 2012
- [C.16] "The SOPHIE search for northern extrasolar planets. Follow-up of ELODIE candidates: Jupiter-analogs around Sun-like stars"  
**I. Boisse**, F. Pepe, C. Perrier et al., IAU 293, Beijing, China, 2012
- [C.17] "Stellar variabilities: challenges for the detection and characterization of exoplanets"  
**I. Boisse**, X. Dumusque, N.C. Santos et al., IAU 293, Beijing, China, 2012
- [C.18] "How the planetary research helps to the stellar dynamo understanding"  
**I. Boisse**, M. Oshagh, C. Lovis et al., IAU 294, Beijing, China, 2012
- [C.19] "HIRES: the high resolution spectrograph for the E-ELT"  
 F. Zerbi, F. Bouchy, J. Fynbo et al., SPIE, 9147, 23
- [C.20] "Dealing with activity in RV planet searchers"  
 B. Royo-Ayala, **I. Boisse**, P. Muirhead et al., Cool Stars 18th, Flagstaff, USA, 2014
- [C.21] "Dealing with activity in RV planet searchers"  
**I. Boisse**, IAU-GA, Focus Meeting, Honolulu, Hawaii, USA, 2015
- [C.22] "SPIRou: a spectropolarimeter for the CFHT"  
 C. Moutou, **I. Boisse**, G. Hébrard et al., 2015, SF2A, Toulouse, France
- [C.23] "Twenty years of giant exoplanets"  
**I. Boisse**, O. Demangeon, F. Bouchy at L. Arnold, 2015, Ed. Proceedings of colloquium
- [C.24] "EELT-HIRES the high-resolution spectrograph for the E-ELT"  
 A. Marconi et al., 2016, SPIE, 9908, 23
- [C.25] "A calibration unit for the near-infrared spectropolarimeter SPIRou"  
**I. Boisse**, S. Perruchot, F. Bouchy, F. Dolon, F. Moreau et al., 2016, SPIE, 9908, 68
- [C.26] "Follow-up and characterization of the TESS exoplanets with SOPHIE, SPIRou, and JWST"  
 N. Crouzet, X. Bonfils, X. Delfosse, **I. Boisse**, G. Hébrard et al., 2016, SF2A, 243

## COMMUNICATIONS

- [D.1] poster, SF2A, 2007, Grenoble, France
- [D.2] poster, IAU 253, 2008, Boston, MA, USA, **bourse : 1200CFH**
- [D.3] poster, Extra Solar Super-Earth, International Workshop, Nantes, France, 2008
- [D.4] poster, Evolution of Planetary and Stellar Systems, Prato, Italy, 2009
- [D.5] **contribution orale**, New Technologies for Probing the diversity of Brown Dwarfs and Exoplanets, Shanghai, China, 2009, **bourse : 800 dollars**
- [D.6] **contribution orale invitée**, Unsinkable planets: telluric planet detection and stellar activity, Exeter, UK, 2009
- [D.7] poster, Towards Other Earths, Porto, Portugal, 2009, **bourse : 300 euros**
- [D.8] **contribution orale**, SF2A, 2010, Marseille, France
- [D.9] **contribution orale invitée**, Astronomy of Exoplanets with Precise Radial Velocities, Penn State University, State College, USA, 2010, **bourse : 1000 dollars**
- [D.10] **contribution orale**, Haute Provence Observatory Colloquium, OHP, France, 2010
- [D.11] **contribution orale**, IAU 273, The physics of Sun and Star Spots, Ventura, CA, USA, 2010, **bourse : 1000 dollars**
- [D.12] **contribution orale**, in EPSC 2010, Rome, Italie, **bourse : 300 euros**
- [D.13] poster, IAU 276, 2010, Turin, Italie, **bourse : 800 euros**

- [D.14] poster, PLATO Science Conference, 2011, Berlin, Allemagne
- [D.15] poster, Exploring strange new worlds, 2011, Flagstaff, USA, **bourse: 500 euros**
- [D.16] poster, Extreme Solar Systems II, 2011, Jackson, USA
- [D.17] **2 contributions orales**, atelier PNP/PNPS "Magnétisme stellaire et Planètes extrasolaires", 2011, OHP, France
- [D.18] poster, New Quests in Stellar Astrophysics. III. A Panchromatic view of solar-like stars, with and without planets, Puerto Vallarta, Mexico
- [D.19] poster, SF2A 2012, Nice, France, **bourse: 600 euros**
- [D.20] **contribution orale**, *How the planetary research helps to the stellar dynamo understanding*, SF2A 2012, Nice, France, **bourse: 600 euros**
- [D.21] poster, *The SOPHIE search for northern extrasolar planets. Follow-up of ELODIE candidates: Jupiter-analogs around Sun-like stars*, 2012, IAU 293, Beijing, China, **bourse: 700 euros**
- [D.22] **contribution orale**, *Stellar variabilities: challenges for the detection and characterization of exoplanets*, 2012, IAU 293, Beijing, China, **bourse: 700 euros**
- [D.23] **contribution orale**, *How the planetary research helps to the stellar dynamo understanding*, 2012, IAU 294, Beijing, China, **bourse: 700 euros**
- [D.25] **contribution orale invitée**, *Radial velocity and stellar activity: false positives and parameter uncertainties*, 2013, Planet Validation Workshop, Marseille, France
- [D.26] **contribution orale**, *The effect of stellar spots on the transit timing variations as a planet validation method*, 2013, Planet Validation Workshop, Marseille, France
- [D.27] **contribution orale**, *Jupiter-analogs around Sun-like stars. New planets from SOPHIE and ELODIE*, ENAA 2013, Porto, Portugal
- [D.28] **contribution orale invitée**, *Stellar activity: Impact for the detection and characterisation of exoplanets*, SF2A 2014, Paris, France
- [D.29] **contribution orale invitée**, *Stellar Activity Features seen from Planet Search Data*, 2014, Cool Stars 18, splinter session, Flagstaff, USA
- [D.30] **contribution orale invitée**, *The outer region of extrasolar planetary systems: Results from radial velocity surveys*, EWASS 2014, Genève, Suisse
- [D.32] **contribution orale**, *The stellar activity impact of radial velocity measurements*, TOE 2015, Porto, Portugal - délégué à E. Hébrard
- [D.33] **contribution orale**, *SPIRou Exoplanet search*, SF2A 2015, Toulouse, France
- [D.34] **contribution orale**, *The first radial velocity measurements of a microlensing event: no evidence for the predicted binary*, IAP colloquium 2015, Paris, France
- [D.35] **contribution orale invitée**, *SPIRou@CFHT, Pathways toward habitable planets*, juillet 2015, splinter session, Bern, Suisse
- [D.36] **contribution orale invitée**, *Dealing with activity in RV planet searches*, IAU GA 2015 - Focus Meeting 1 Statistics and Exoplanets, Aout 2015, Honolulu, Hawaii, USA
- [D.37] **contribution orale**, *The first radial velocity measurements of a microlensing event: no evidence for the predicted binary*, 20th Microlensing workshop, Janvier 2016, Paris, France
- [D.38] **contribution orale**, *Exploration des plantes et naines brunes longue priode et synergie avec GAIA*, 10 ans de sciences avec SOPHIE, Septembre 2016, OHP, France

## SEMINAIRES

- [E.1] *Improving the radial-velocimetry accuracy, from the instrument to the stars* CAUP, Porto, Portugal, février 2010
- [E.2] *Diagnostics de spectroscopie Doppler pour la recherche et caractérisation d'exoplanètes* OHP, France, septembre 2010
- [E.3] *La question de la variabilité stellaire pour la détection des planètes par vitesses radiales* FOST meeting, IPAG, Grenoble, France, janvier 2011
- [E.4] *The stellar variability examination for the detection of exoplanets with RV*, 4 mars 2011, LAM, Marseille, France
- [E.5] Invité *The stellar variability examination for the detection of exoplanets with RV*, 16 juin 2011, IRAP, Toulouse, France
- [E.6] Invité *Stellar variability: Impact on the detection and characterization of exoplanets*, 2 février 2012, School of Physics and Astronomy, University of St Andrews, UK

[E.7] *Stellar variability: Impact on the detection and characterization of exoplanets*, 2013, ESO Santiago, Chile

[E.8] *First spectroscopic investigation of a microlensing event: what's going wrong ?*, 2015, IA, Porto, Portugal

## Temps d'observation accordés récemment

- en tant que PI : PNP 2017A, 80 nuits sur SOPHIE à l'OHP, "Recherche et caractrisation des planètes extrasolaires dans l'hémisphère Nord" - en tant que PI : PNP 2016B, 79 nuits sur SOPHIE à l'OHP, "Recherche et caractrisation des planètes extrasolaires dans l'hémisphère Nord" - en tant que PI : PNP 2015A, 2 nuits en mode service, "Deciphering stellar activity with SOPHIE radial velocities and K2 simultaneous photometry" - en tant que PI : CFHT 2014B, 11h sur ESPADoNS au CFHT, Hawaii "A needed step towards other Earths: Understand the magnetic activity of solar-type stars and its impact on CCF and RV measurements"

- en tant que PI : PNP 2014A, 33h sur Narval au TBL au Pic du midi "A needed step towards other Earths: Understand the magnetic activity of solar-type stars and its impact on CCF and RV measurements"

- en tant que PI : ESO P92 et P93 092.C-763 et 093.C-0532, 3.9h et 5.0h sur UVES au VLT, Chili "UVES radial-velocity confirmation of a binary system detecting by microlensing."

- en tant que PI : OPTICON 2013A/20, 5 nuits SOPHIE à l'OHP (suivi VR candidats HATNet)

- en tant que PI : OPTICON 2013B/58, 5 nuits SOPHIE à l'OHP (suivi VR candidats HATNet)

- en tant que PI : ESO P91 (Juin 2013) 091.C-0853, 6 nuits HARPS au 3.6m à La Silla "A needed step towards other Earths: Understand the magnetic activity of solar-type stars and its impact on CCF and RV measurements"

- en tant que co-I : ESO HARPS ESO P93 "A needed step towards other Earths: Understand the magnetic activity of solar-type stars and its impact on CCF and RV measurements" (PI: Dumusque)

- en tant que co-I : ESO HARPS Large program 190.C-0027(B) to search for planets orbiting metal-poor stars (PI: Santos)

- en tant que co-I : ESO P91 (Septembre 2013) 091.C-0271, 3 nuits HARPS au 3.6m à LaSilla "Detecting the optical reflected light spectrum on 51Pegb" (PI: Santos)

- en tant que co-I : Large program "MaTYSSSE : Magnetic topologies of young stars and the survival of close-in massive exoplanets. on ESPaDOnS" on the CFHT (8 semestres) and on Narval at TBL (4 semestres). (PI: Donati)

- en tant que co-I : Simultaneous RV/Spectropolarimetric observations of M dwarfs on SOPHIE at OHP and Narval at TBL (PI: E. Hébrard)

- en tant que co-I : TRANSIT Consortium to characterize transiting planets (PI: G. Hébrard)

- en tant que co-I : SOPHIE Consortium to search for planets in the northern hemisphere semester 2013, 2014A and B (PI: Bouchy)