Stéphane Blondin

Curriculum Vitæ

Résidence Parc du Félibrige
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Associate researcher with 20 years of experience in optical/infrared data analysis and numerical simulations. Associate member of key future astronomical facilities (VRO/LSST, ATHENA, LISA). Software development and user-support since 2007. Awarded 10 research grants and supervised 6 students. Published over 50 peer-reviewed papers totalling over 7000 refereed citations.

Education

2016 **French Habilitation (Habilitation à Diriger des Recherches)**, Aix-Marseille Université, France
ℹ required in France to be the main supervisor of PhD students and to apply for Full Professor positions
Thesis title: *Thermonuclear supernovae: observed properties and radiative-transfer modeling*

2005 **PhD in Astronomy**, Ludwig-Maximilians Universität München (LMU), European Southern Observatory (ESO), Germany (magna cum laude)
Thesis title: *Optical Spectra of Thermonuclear Supernovae in the Local and Distant Universe*
Supervisors: Dr. Bruno Leibundgut (ESO) and Prof. Adalbert Pauldrach (LMU)

2002 **Master of Physics**, University of Southampton, UK (first class honours)

1997 **French Baccalaureate with International Option (OIB)**, Lycée International de Saint Germain en Laye (British International Section), France
ℹ French Baccalaureate with two additional UK A-Levels (English literature and History)

Academic Appointments

Feb 2010 – present **Associate Researcher of the French National Centre for Scientific Research (CNRS)**

Jan 2021 – present	Laboratoire d'Astrophysique de Marseille (LAM), Marseille, France
Jan 2018 – Jan 2021	Laboratoire Franco-Chilien d'Astronomie (LFCA), Santiago, Chile
Sep 2012 – Jan 2018	Laboratoire d'Astrophysique de Marseille (LAM), Marseille, France
Feb 2010 – Aug 2012	Centre de Physique des Particules de Marseille (CPPM), Marseille, France

Jan 2019 – Dec 2019 **Visiting Professor**, Pontificia Universidad Católica de Chile (PUC), Santiago, Chili
ℹ joint appointment with the Laboratoire Franco-Chilien d'Astronomie (LFCA) of the CNRS

Sep 2008 – Jan 2010 **ESO Fellow**, European Southern Observatory, Garching bei München, Germany
duty: pre-commissioning verification for the XSHOOTER instrument

Nov 2005 – Aug 2008 **Postdoctoral Fellow**, Harvard-Smithsonian Center for Astrophysics (CfA), Cambridge, MA, USA
duty: responsible of the CfA supernova spectroscopic follow-up program (> 600 h observing time)

Research Highlights

- author of the **most popular tool for supernova classifications** (Blondin & Tonry 2007)
- publication of the **largest spectroscopic data set** on Type Ia supernova (Blondin et al. 2012)
- ***Nature* Research Highlight** for paper on time-dilation in supernova (Blondin et al. 2008)
- **No. 32 top-cited paper of 2007** on the nature of Dark Energy (Wood-Vasey et al. 2007)
- author of **57 refereed publications**: 3 with > 500 citations, 19 with > 100 citations, $h = 38$
- **38 invited talks** at conferences, workshops, colloquia, seminars

Awards

2002 University of Southampton Physics and Astronomy Departmental Prize
2001 University of Southampton Physics and Astronomy Departmental Prize

Grants and Fellowships

2022 French CNRS Interdisciplinary (MITI) "Rare events" research grant, Co-I
2022 French CNRS National Stellar Physics Programme (PNPS) research grant
2021 European Southern Observatory (ESO) long-term Science Visitorship
2021 Seed Money Project of the University of Munich's (TUM/LMU) Excellence Cluster ORIGINS
2021 French CNRS National Stellar Physics Programme (PNPS) research grant
2017 French CNRS National Stellar Physics Programme (PNPS) research grant
2016 French CNRS National Stellar Physics Programme (PNPS) research grant
2014 French CNRS National Stellar Physics Programme (PNPS) research grant
2012 Marie-Curie International Reintegration Grant (IRG), Co-I (100 000 EUR)
2011 French National Research Agency (ANR) grant, Co-I (210 000 EUR)
Radiative Transfer modelling of Core-Collapse Supernovae (RTCCSN)
2011 Installation Research Grant from the city of Marseille
2008 European Southern Observatory (ESO) Fellowship
2007 "Initiative Postdoc" Grant from the French Ministry of Research
2003 NATO Advanced Study Institute Grant
2002 International Max Planck Research School on Astrophysics (IMPRS) Studentship

Invited Talks and Lectures (selected, last 5 years)

2021 **Invited Talk**, Radionuclides: Nuclear Physics, Astrophysical Models, and Observations, Seattle
Stable nickel production in thermonuclear Type Ia supernovae
2021 **Guest Lecturer**, Excellence Cluster ORIGINS, Garching, Germany
Stable Nickel Production in Type Ia Supernovae: A Smoking Gun for the Progenitor Mass?
2019 **Invited Seminar**, Observatoire Astronomique de Strasbourg, France
A Smoking Gun for the Progenitor Mass of Type Ia Supernovae
2018 **Invited Colloquium**, Pontificia Universidad Católica de Chile, Santiago, Chile
Predicting the radiative display of Type Ia Supernovae: The case for multiple progenitor channels
2018 **Invited Talk**, South American Supernovae workshop (SAS18), ESO Santiago, Chile
Sub-Chandrasekhar-Mass Progenitors of Type Ia Supernovae
2017 **Guest Lecturer**, Special Universe Lectures, Excellence Cluster Universe, Garching, Germany
Type Ia Supernovae: observed properties, explosion physics, and open questions
Predicting the radiative display of Type Ia Supernovae: 1. testing the standard model
Predicting the radiative display of Type Ia Supernovae: 2. beyond the standard model

Student Supervision

2019 **Master thesis supervisor** for Jules Allegre, Ecole Normale Supérieure de Lyon (3 months)
Comparison of 1D/2D double-detonation models for thermonuclear supernovae with SN 2011fe
2018 **Master thesis supervisor** for Lucie Khlat, Ecole Normale Supérieure de Lyon (3 months)
Spectroscopic identification of supernovae with the Supernova Identification code (SNID)
2017 **Master thesis supervisor** for Jordan Noël, Université de Montpellier (4 months)
Radiative-transfer modeling of gamma-ray radiation in thermonuclear supernovae

2016 **Bachelor thesis supervisor** for Joshua Esteves, Aix-Marseille Université (1 month)
Structure and evolution of progenitor white dwarf stars of thermonuclear supernovae

2015 **Bachelor thesis supervisor** for Vadim Becquet, Aix-Marseille Université (1 month)
Confronting observations and radiative-transfer models of Type Ia supernovae

2015 **Bachelor thesis supervisor** for Sébastien Aynaud, Aix-Marseille Université (1 month)
Confronting observations and radiative-transfer models of Type Ia supernovae

Administrative and Collective Duties

- **Reviewer for research grants**
  - European Research Council (ERC)
  - Spanish State Research Agency (AEI)
  - US National Science Foundation (NSF)
  - US-Israel Binational Science Foundation (BSF)
  - Chilean National Fund for Scientific and Technological Development (FONDECYT)
  - Netherlands Organisation for Scientific Research (NWO)
- **Resource/Time Allocation Committees**
  - Reviewer, UK Distributed Research utilising Advanced Computing (DiRAC) $\times 3$
  - External reviewer, Optical Infrared Coordination Network for Astronomy (OPTICON)
  - Panel assistant, ESO Observing Programme Committee (OPC) $\times 3$
- **Selection/Evaluation Committees**
  - Bachelor thesis defense committee, Pontificia Universidad Católica de Chile (2018, 2019)
  - Master's thesis defense committee, Pontificia Universidad Católica de Chile (2018)
  - Postdoc selection committee, French Excellence Laboratory OCEVU (2016)
  - External evaluator, ESO Scientific Personnel Committee (year undisclosed)
  - External examiner, Young Researcher prize of the French Physics Society (year undisclosed)
- **Conference/workshop organisation** (selected, last 5 years)
  - **Organiser**, *Hybrid in-person/virtual workshop on the Hubble Tension* (2021)
    MIAPP/Excellence Cluster ORIGINS, Garching
  - **Organiser**, *Radiative transfer in supernovae* (2020, cancelled due to Covid-19)
    Weizmann Institute for Science, Schwartz/Reisman Institute for Theoretical Physics
  - **Organiser**, *Radiative transfer in supernovae* (2019)
    Max-Planck Institute for Astrophysics (MPA), Garching
  - **Organiser**, *Radiation Transfer and Explosive Thermonuclear Burning in Supernovae* (2018)
    Weizmann Institute for Science, Schwartz/Reisman Institute for Theoretical Physics
- **Regular referee** (3-4 requests per year) for peer-reviewed journals: A&A, ApJ, MNRAS, Nature, PASP
- **Full member**: European Astronomical Society (EAS, since 2021); International Astronomical Union (IAU, since 2018); French Astronomical and Astrophysical Society (SF2A, since 2013)

Ongoing Collaborations (selected)

ATHENA **Advanced Telescope for High Energy Astrophysics (ESA Large mission)**
Co-I on the joint proposal between my home institute and the French Space Agency (CNES)
Member of the "Luminous Extragalactic Transients" science working group

ePESSTO+ **advanced Public ESO Spectroscopic Survey for Transient Objects (Large Programme)**
Co-I, ESO-NTT Large Programme
Member of the "Faint and Fast Transients" and "Fast Blue Optical Transients" science groups

LISA **Laser Interferometer Space Antenna (ESA Large mission)**
Associate member of the LISA consortium and member of the Astrophysics working group
Co-author of the chapter on stellar-mass binaries of the Astrophysics WG white paper

SNRadTrans **Type Ia Supernova Radiative-Transfer code-comparison initiative**
Leader and co-PI of the code-comparison initiative, involving 11 teams
Developer of the benchmark problems (Python code available on github)

VRO/LSST **Vera Rubin Observatory Legacy Survey of Space and Time**
Co-PI of the French CNRS/INSU contribution, with full data access rights
Member of the "Transients and Variable Stars" science collaboration

Observing Experience and Data Reduction

- **Principal Investigator** on 6 ESO-VLT programmes (regular and Target-of-Opportunity)
- **Co-I on over 100 proposals** at ESO-VLT*, HST, Gemini, LCO*, MMT, CTIO, FLWO*
  *including visitor mode
- **optical & near-infrared spectroscopy** with VLT+FORS, VLT+XSHOOTER, Gemini+GMOS, LCO Magellan 6.5 m+LDSS, FLWO 1.5 m+FAST
- **hands-on telescope operation** at the FLWO 1.5 m telescope in Tucson, AZ
- implementation of **2D deconvolution for spectral extraction** on complex backgrounds
- ample experience with **spectroscopic data reduction** and **pipeline development** (since 2002)

Outreach

- Organiser of **public talks and astronomical activities for elementary schools** (since 2017)
- Regular **astronomy consultant for French media**: La Recherche, Ciel & Espace, Science & Vie, Le Monde (since 2013)
- Regular **scientific animator in open-door events** such as the French nationwide science festival "Fête de la Science" (since 2010)

Computing and Language Skills

- proficient in **numerous coding languages**: Python, Fortran, C/C++, IDL, bash/csh
- **code parallelisation** (OpenMP/MPI) and **object-oriented programming** (OOP)
- regular user of **high-performance computing** clusters ($> 500,000$ CPU hours/year)
- training in **Machine-Learning in Python** and **IEEE Software Requirements**
- **French** (native), **English** (bilingual), **Spanish** (fully proficient), **German** (intermediate)

References

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Prof. Brian Schmidt
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First-author Refereed Publications

13 first-author refereed publications (including submitted that appear on arXiv).
Total citations: 1149; $h-\mathrm{index} = 12$ (as of June 9, 2022)

Blondin, **S.**, E. Bravo, F. X. Timmes, L. Dessart, and D. J. Hillier (Apr. 2022). "Stable nickel production in type Ia supernovae: A smoking gun for the progenitor mass?" In: *A&A* 660, A96, A96. DOI: 10.1051/0004-6361/202142323. arXiv: 2109.13840.

Blondin, **S.**, L. Dessart, and D. J. Hillier (Mar. 2018). "The detonation of a sub-Chandrasekhar-mass white dwarf at the origin of the low-luminosity Type Ia supernova 1999by". In: *MNRAS* 474, pp. 3931–3953. DOI: 10.1093/mnras/stx3058. arXiv: 1711.09107.

Blondin, **S.**, L. Dessart, D. J. Hillier, and A. M. Khokhlov (Aug. 2017). "Evidence for sub-Chandrasekhar-mass progenitors of Type Ia supernovae at the faint end of the width-luminosity relation". In: *MNRAS* 470, pp. 157–165. DOI: 10.1093/mnras/stw2492. arXiv: 1706.01901.

Blondin, **S.**, L. Dessart, and D. J. Hillier (Apr. 2015a). "A one-dimensional Chandrasekhar-mass delayed-detonation model for the broad-lined Type Ia supernova 2002bo". In: *MNRAS* 448, pp. 2766–2797. DOI: 10.1093/mnras/stv188. arXiv: 1501.06583.

Blondin, **S.**, L. Dessart, D. J. Hillier, and A. M. Khokhlov (Mar. 2013). "One-dimensional delayed-detonation models of Type Ia supernovae: confrontation to observations at bolometric maximum". In: *MNRAS* 429, pp. 2127–2142. DOI: 10.1093/mnras/sts484. arXiv: 1211.5892.

Blondin, **S.**, T. Matheson, R. P. Kirshner, et al. (May 2012). "The Spectroscopic Diversity of Type Ia Supernovae". In: *AJ* 143, 126, p. 126. DOI: 10.1088/0004-6256/143/5/126. arXiv: 1203.4832.

Blondin, **S.**, D. Kasen, F. K. Röpke, R. P. Kirshner, and K. S. Mandel (Oct. 2011). "Confronting 2D delayed-detonation models with light curves and spectra of Type Ia supernovae". In: *MNRAS* 417, pp. 1280–1302. DOI: 10.1111/j.1365-2966.2011.19345.x. arXiv: 1107.0009.

Blondin, **S.**, K. S. Mandel, and R. P. Kirshner (Feb. 2011). "Do spectra improve distance measurements of Type Ia supernovae?" In: *A&A* 526, A81, A81. DOI: 10.1051/0004-6361/201015792. arXiv: 1012.0005.

Blondin, **S.**, J. L. Prieto, F. Patat, P. Challis, M. Hicken, R. P. Kirshner, T. Matheson, and M. Modjaz (Mar. 2009). "A Second Case of Variable Na I D Lines in a Highly Reddened Type Ia Supernova". In: *ApJ* 693, pp. 207–215. DOI: 10.1088/0004-637X/693/1/207. arXiv: 0811.0002.

Blondin, **S.**, T. M. Davis, K. Krisciunas, et al. (Aug. 2008). "Time Dilation in Type Ia Supernova Spectra at High Redshift". In: *ApJ* 682, pp. 724–736. DOI: 10.1086/589568. arXiv: 0804.3595.

Blondin, **S.** and J. L. Tonry (Sept. 2007a). "Determining the Type, Redshift, and Age of a Supernova Spectrum". In: *ApJ* 666, pp. 1024–1047. DOI: 10.1086/520494. arXiv: 0709.4488.

Blondin, **S.**, L. Dessart, B. Leibundgut, et al. (Mar. 2006). "Using Line Profiles to Test the Fraternity of Type Ia Supernovae at High and Low Redshifts". In: *AJ* 131, pp. 1648–1666. DOI: 10.1086/498724. eprint: astro-ph/0510089.

Blondin, **S.**, J. R. Walsh, B. Leibundgut, and G. Sainton (Feb. 2005). "Extracting clean supernova spectra. Towards a quantitative analysis of high-redshift Type Ia supernova spectra". In: *A&A* 431, pp. 757–771. DOI: 10.1051/0004-6361:20042009. eprint: astro-ph/0410406.

Refereed Publications

57 refereed publications (13 as first author; including submitted that appear on arXiv).
Total citations: 7178; $h-\mathrm{index} = 38$ (as of June 9, 2022)

Amaro-Seoane, Pau, Jeff Andrews, Manuel Arca Sedda, et al. (Mar. 2022). "Astrophysics with the Laser Interferometer Space Antenna". In: *Submitted to Living Review in Relativity*, arXiv:2203.06016, arXiv:2203.06016. arXiv: 2203.06016 [gr-qc].

Blondin, **S.**, E. Bravo, F. X. Timmes, L. Dessart, and D. J. Hillier (Apr. 2022). "Stable nickel production in type Ia supernovae: A smoking gun for the progenitor mass?" In: *A&A* 660, A96, A96. DOI: 10.1051/0004-6361/202142323. arXiv: 2109.13840.

Brennan, S. J., M. Fraser, J. Johansson, et al. (July 2022a). "Photometric and spectroscopic evolution of the interacting transient AT 2016jbu(Gaia16cfr)". In: *MNRAS* 513.4, pp. 5642–5665. DOI: 10.1093/mnras/stac1243. arXiv: 2102.09572 [astro-ph.SR].

Brennan, S. J., M. Fraser, J. Johansson, et al. (July 2022b). "Progenitor, environment, and modelling of the interacting transient AT 2016jbu (Gaia16cfr)". In: *MNRAS* 513.4, pp. 5666–5685. DOI: 10.1093/mnras/stac1228. arXiv: 2102.09576 [astro-ph.HE].

Shen, K. J., **S. Blondin**, D. Kasen, L. Dessart, D. M. Townsley, S. Boos, and D. J. Hillier (Mar. 2021). "Non-local Thermodynamic Equilibrium Radiative Transfer Simulations of Sub-Chandrasekhar-mass White Dwarf Detonations". In: *ApJL* 909.2, L18, p. L18. DOI: 10.3847/2041-8213/abe69b. arXiv: 2102.08238 [astro-ph.HE].

Flörs, A., J. Spyromilio, S. Taubenberger, et al. (Jan. 2020). "Sub-Chandrasekhar progenitors favoured for Type Ia supernovae: evidence from late-time spectroscopy". In: *MNRAS* 491.2, pp. 2902–2918. DOI: 10.1093/mnras/stz3013. arXiv: 1909.11055.

Galbany, L., C. Ashall, P. Höflich, et al. (Oct. 2019). "Evidence for a Chandrasekhar-mass explosion in the Ca-strong 1991bg-like type Ia supernova 2016hnk". In: *A&A* 630, A76, A76. DOI: 10.1051/0004-6361/201935537. arXiv: 1904.10034.

Blondin, **S.**, L. Dessart, and D. J. Hillier (Mar. 2018). "The detonation of a sub-Chandrasekhar-mass white dwarf at the origin of the low-luminosity Type Ia supernova 1999by". In: *MNRAS* 474, pp. 3931–3953. DOI: 10.1093/mnras/stx3058. arXiv: 1711.09107.

Blondin, **S.**, L. Dessart, D. J. Hillier, and A. M. Khokhlov (Aug. 2017). "Evidence for sub-Chandrasekhar-mass progenitors of Type Ia supernovae at the faint end of the width-luminosity relation". In: *MNRAS* 470, pp. 157–165. DOI: 10.1093/mnras/stw2492. arXiv: 1706.01901.

Dhawan, S., B. Leibundgut, J. Spyromilio, and **S. Blondin** (June 2017). "Two classes of fast-declining Type Ia supernovae". In: *A&A* 602, A118, A118. DOI: 10.1051/0004-6361/201629793. arXiv: 1702.06585.

Hicken, M., A. S. Friedman, **S. Blondin**, et al. (Nov. 2017). "Type II Supernova Light Curves and Spectra from the CfA". In: *ApJS* 233, 6, p. 6. DOI: 10.3847/1538-4365/aa8ef4. arXiv: 1706.01030.

Dhawan, S., B. Leibundgut, J. Spyromilio, and **S. Blondin** (Apr. 2016). "A reddening-free method to estimate the ^{56}Ni mass of Type Ia supernovae". In: *A&A* 588, A84, A84. DOI: 10.1051/0004-6361/201527201. arXiv: 1601.04874.

Narayan, G., A. Rest, B. E. Tucker, et al. (May 2016). "Light Curves of 213 Type Ia Supernovae from the ESSENCE Survey". In: *ApJS* 224, 3, p. 3. DOI: 10.3847/0067-0049/224/1/3. arXiv: 1603.03823.

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Dessart, L., **S. Blondin**, D. J. Hillier, and A. Khokhlov (June 2014a). "Constraints on the explosion mechanism and progenitors of Type Ia supernovae". In: *MNRAS* 441, pp. 532–550. DOI: 10.1093/mnras/stu598. arXiv: 1310.7747.

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Dessart, L., D. J. Hillier, **S. Blondin**, and A. Khokhlov (July 2014c). "Critical ingredients of Type Ia supernova radiative-transfer modelling". In: *MNRAS* 441, pp. 3249–3270. DOI: 10.1093/mnras/stu789. arXiv: 1308.6352.

Modjaz, M., **S. Blondin**, R. P. Kirshner, et al. (May 2014). "Optical Spectra of 73 Stripped-envelope Core-collapse Supernovae". In: *AJ* 147, 99, p. 99. DOI: 10.1088/0004-6256/147/5/99. arXiv: 1405.1910.

Blondin, **S.**, L. Dessart, D. J. Hillier, and A. M. Khokhlov (Mar. 2013). "One-dimensional delayed-detonation models of Type Ia supernovae: confrontation to observations at bolometric maximum". In: *MNRAS* 429, pp. 2127–2142. DOI: 10.1093/mnras/sts484. arXiv: 1211.5892.

Dessart, L., R. Waldman, E. Livne, D. J. Hillier, and **S. Blondin** (Feb. 2013). "Radiative properties of pair-instability supernova explosions". In: *MNRAS* 428, pp. 3227–3251. DOI: 10.1093/mnras/sts269. arXiv: 1210.6163.

Blondin, **S.**, T. Matheson, R. P. Kirshner, et al. (May 2012). "The Spectroscopic Diversity of Type Ia Supernovae". In: *AJ* 143, 126, p. 126. DOI: 10.1088/0004-6256/143/5/126. arXiv: 1203.4832.

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Rest, A., R. J. Foley, B. Sinnott, et al. (May 2011a). "Direct Confirmation of the Asymmetry of the Cas A Supernova with Light Echoes". In: *ApJ* 732, 3, p. 3. DOI: 10.1088/0004-637X/732/1/3. arXiv: 1003.5660.

Rest, A., B. Sinnott, D. L. Welch, R. J. Foley, G. Narayan, K. Mandel, M. E. Huber, and **S. Blondin** (May 2011b). "On the Interpretation of Supernova Light Echo Profiles and Spectra". In: *ApJ* 732, 2, p. 2. DOI: 10.1088/0004-637X/732/1/2. arXiv: 1004.3783.

Burke, D. L., T. Axelrod, **S. Blondin**, et al. (Sept. 2010b). "Precision Determination of Atmospheric Extinction at Optical and Near-infrared Wavelengths". In: *ApJ* 720, pp. 811–823. DOI: 10.1088/0004-637X/720/1/811.

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Foley, R. J., T. Matheson, **S. Blondin**, et al. (Apr. 2009). "Spectroscopy of High-Redshift Supernovae from the ESSENCE Project: The First Four Years". In: *AJ* 137, pp. 3731–3742. DOI: 10.1088/0004-6256/137/4/3731. arXiv: 0811.4424.

Hicken, M., P. Challis, S. Jha, et al. (July 2009a). "CfA3: 185 Type Ia Supernova Light Curves from the CfA". In: *ApJ* 700, pp. 331–357. DOI: 10.1088/0004-637X/700/1/331. arXiv: 0901.4787.

Hicken, M., W. M. Wood-Vasey, **S. Blondin**, P. Challis, S. Jha, P. L. Kelly, A. Rest, and R. P. Kirshner (Aug. 2009b). "Improved Dark Energy Constraints from $\sim$100 New CfA Supernova Type Ia Light Curves". In: *ApJ* 700, pp. 1097–1140. DOI: 10.1088/0004-637X/700/2/1097. arXiv: 0901.4804.

Modjaz, M., W. Li, N. Butler, et al. (Sept. 2009). "From Shock Breakout to Peak and Beyond: Extensive Panchromatic Observations of the Type Ib Supernova 2008D Associated with Swift X-ray Transient 080109". In: *ApJ* 702, pp. 226–248. DOI: 10.1088/0004-637X/702/1/226. arXiv: 0805.2201.

Simon, J. D., A. Gal-Yam, O. Gnat, et al. (Sept. 2009). "Variable Sodium Absorption in a Low-extinction Type Ia Supernova". In: *ApJ* 702, pp. 1157–1170. DOI: 10.1088/0004-637X/702/2/1157. arXiv: 0907.1083.

Becker, A. C., K. Arraki, N. A. Kaib, et al. (July 2008). "Exploring the Outer Solar System with the ESSENCE Supernova Survey". In: *ApJL* 682, pp. L53–L56. DOI: 10.1086/590429. arXiv: 0805.4608.

Blondin, **S.**, T. M. Davis, K. Krisciunas, et al. (Aug. 2008). "Time Dilation in Type Ia Supernova Spectra at High Redshift". In: *ApJ* 682, pp. 724–736. DOI: 10.1086/589568. arXiv: 0804.3595.

Dessart, L., **S. Blondin**, P. J. Brown, et al. (Mar. 2008). "Using Quantitative Spectroscopic Analysis to Determine the Properties and Distances of Type II Plateau Supernovae: SN 2005cs and SN 2006bp". In: *ApJ* 675, pp. 644–669. DOI: 10.1086/526451. arXiv: 0711.1815.

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- 12 AstroNotes reporting spectroscopic classifications of supernovae for the adH0cc collaboration
- 2 Astronomer's Telegrams (ATel) reporting on HST observations of supernovae
- 2 GRB Coordinates Network circulars (GCN) reporting spectroscopic classifications and redshifts of supernovae and GRBs (2 as first author)