

Dr Nicolas Labrosse

PhD (Orsay), FInstP, FRAS, FHEA
Senior Lecturer in Physics and Astronomy

Personal Details

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Date of Birth 1975, July 18th

Affiliations Royal Astronomical Society; Institute of Physics; Higher Education Academy; International Astronomical Union

Employment

Since 01/2017 Senior Lecturer in Physics and Astronomy, University of Glasgow
08/2015–12/2016 Senior University Teacher in Physics and Astronomy, University of Glasgow
09/2012–07/2015 University Teacher in Physics and Astronomy, University of Glasgow
09/2007–08/2012: Lecturer in Astronomy & Astrophysics, University of Glasgow
02/2002–09/2007: Research assistant in Solar System Physics, Aberystwyth University

Education

2007–2009: University of Glasgow. Postgraduate Certificate in Academic Practice
1998–2001: Paris XI University. PhD in Plasma Physics
Supervisor: P. Gouttebroze, Institut d'Astrophysique Spatiale (IAS)
Thesis title: Modelling of the helium spectrum in solar prominences
1997–1998: Paris XI University. DEA in Plasma Physics
Research training at IAS supervised by P. Gouttebroze, J.-C. Vial
Thesis title: Solar prominence diagnostics
1996–1997: Bordeaux I University. Maîtrise in Physics
Subjects: Theoretical physics, Maths, Astrophysics
1995–1996: Bordeaux I University. Licence in Physics
Subjects: Theoretical physics, Maths
1993–1995: Bordeaux I University. DEUG A
Subjects: Physics, Maths

Teaching Experience

Since 09/2007: University of Glasgow
underlined entries *Lectures, tutorials, supervisions, labs – contact hours per year*
show current
activities

- Solar System Physics 1 (Astronomy 1) – 6
- Introduction to Cosmology (Astronomy 1) – 10
- Astronomy 1 tutorials – 16
- Laboratory (Astronomy 1) – 12
- Solar System I (Exploring the Cosmos 1) – 9
- Life and Death of Stars I (Exploring the Cosmos 1) – 9
- Theoretical Astrophysics (Astronomy 2) – 15
- Astronomy 2 supervisions – 8
- Laboratory (Astronomy 2) – 42
- Matter in the Universe (Exploring the Cosmos 2) – 10
- Numerical Methods (Physics 3/4) – 9
- Cosmology I (Astronomy 3/4) – 12

- Heliophysics and Stellar Atmospheres II (Astronomy 3/4) – 12
- Stellar Structure and Evolution II (Astronomy 3/4) – 12
- Astronomy 3/4 supervisions – 12
- Laboratory (Astronomy 4) – 36
- Research Skills (Postgraduate) – 10
- The Sun's Atmosphere (Postgraduate) – 5
- Supervision of honours and masters projects*
- Supervision of summer undergraduate research projects – 6 weeks*
- Supervision of summer undergraduate teaching projects – 6 weeks*

2002–2007: University of Wales Aberystwyth

- Introductory Astronomy (Year 1) – 5 lectures per year

2000–2001: Paris XI University

- CAML programming language (Year 1)
- Professional Project (Year 1)

Responsibilities

International:

2016-2018 **Leader of International Team** “Solving the prominence paradox”, ISSI – International Space Science Institute (Bern). I will organise two meetings and coordinate the work of a dozen of researchers.

Since 08/2015: **Member (Secretary) of Organising Committee** “Commission E1 (Solar Radiation and Structure), International Astronomical Union”
Team Leader SSALMON “Prominences” experts team – Solar Simulations for the Atacama Large Millimeter Observatory Network

Since 2012: **Science Co-Investigator** for the Extreme Ultraviolet Imager (EUI) instrument on the European Space Agency's Solar Orbiter flagship mission (due to be launched in 2017). I perform numerical simulations in relation to EUI's scientific objectives.

2009-2011: **Leader of International Team** “Solar Prominence Formation and Equilibrium: New Data, New Models”, ISSI. I have organised several meetings and coordinated the work of a dozen of researchers.

Member of International Team “Mining and exploiting the NASA Solar Dynamics Observatory data in Europe”, ISSI. I was invited to join this interdisciplinary group as a recognition of my work in solar activity monitoring.

2007-2009: **Leader of International Team** “Spectroscopy and Imaging of Quiescent and Eruptive Solar Prominences from Space”, ISSI. I have organised several meetings and coordinated the work of a dozen of researchers.

External reviewer for several international journals and grant agencies.

National:

Since 11/2017 **Institute of Physics** Higher Education Group, Chair

Institute of Physics Accreditation Panel, Assessor

Since 08/2015 **Institute of Physics Scotland** Committee member.

University of Glasgow:

Since 2017 **Subject moderator** for Glasgow International College's "STEM PGT pathways"

Since 2015 **Senate Student Conduct Committee** member

College E-Newsletter Editorial Board member.

Since 2011 **“Space Glasgow” Research Cluster Steering Group Committee member.** I help setting the strategy and promote the University's space-related research activities to major national and international partners.

Departmental:

2014-2016 **Astronomy 1 Lab Head.** I jointly coordinate and run the practical teaching in

- Astronomy to 1st year students with four demonstrators under my supervision.
- 2012-13**
Since 2012 **Deputy Class Head** for Exploring the Cosmos 1
Teaching Committee member. The School Teaching Committee is responsible for leading the development of strategies for enhancing learning and teaching within the School, managing the provision of high-quality teaching and associated professional activities within the School, and establishing consistent practices and policies and useful synergies in School curricula and teaching activity.
- 2011-2017**
Since 2011: **PGT Examination Board, Chair**
Convenor of Postgraduate taught master programmes. I organise, coordinate and promote all of the School's taught Masters programmes in, and at the interface with, Physics.
Advisor of studies for taught postgraduate students.
- 2010-11:** **Astronomy 2 Laboratory Head.** I coordinate the experimental teaching in Astronomy to 2nd-year students with three demonstrators under my supervision.
- Since 2011:** **Postgraduate Prize Committee member.** Rewarding postgraduate research students who have submitted the best 1st and 2nd year reports.
- 2008-2010** **Exploring the Cosmos 2 Class Head.** I coordinate the teaching activities in this module and am responsible for 4 lecturers.
- Since 2008:** **Internal Checker (Astronomy),** astronomy examination papers.
- 2008-2014** **Recruitment and Retention Committee member.** I contribute to recruiting physics students in particular via the organisation and co-animation of the Science Startup Masterclasses attracting 60 S1/S2 pupils per year.
- Since 2007:** **Astronomy Examination Board Committee member**
 Internal examiner for MSc and PhD degrees
 Chair of PhD examinations

Group:

- 2008-2011:** **Astronomy & Astrophysics group seminar organiser.** I organised around fifty research talks by high-profile researchers, inviting them to visit our group.
- 2008-2010:** **Member of the Local Organising Committee** for the Royal Astronomical Society National Astronomy Meeting 2010 (12-16th April 2010). In charge of the physical and computer infrastructures, I ensured the smooth running of this major conference with over 600 delegates attending on the University premises.
- 2009:** **Member of the Local Organising Committee** for the Solar Observational Data Analysis School (June 1-5, 2009). I helped with the computing requirements for this international summer school funded by the European Union.
- 1999-2001** **PhD representative** at the Institut d'Astrophysique Spatiale

Grants and Awards

- 2017** Carnegie Undergraduate Vacation Scholarship (summer student) - £1350
 Royal Astronomical Society Research Grant (summer student) - £1200
- 2016** International Space Science Institute - £20k for leading an international team on solar prominences
 Royal Astronomical Society Research Grant (summer student) - £1200
- 2015** PI on **University of Glasgow Learning and Teaching Development Fund's** project "Transitions to PGT study" - £4506 (08/2015-07/2016)
 PI on **University of Glasgow Chancellor's Fund's** project Kelvin News: Taught Postgraduate Students Communicate on Physics and Astronomy - £2000 (1/1/2015-31/12/2016)
 PI on **RAS** grant 'Support for Astronomy & Geophysics speakers at the French Café Scientifique in Glasgow' - £300 (09/2015-08/2017)
- 2014:** Co-I on **EC FP7 F-Chroma** project "Chromospheric Flares: Observations, Models and Archives" - £471,072 (1/1/2014 – 31/12/2016)
 Co-I on **STFC** Consolidated grant in solar and astrophysical plasmas - £901,409

(1/4/2014 – 31/3/2017)

- 2012:** PI of telescope time at **THEMIS** for the project “Magnetic field structure of the prominences, solar tornadoes and spicules” (20 days) with **SOLARNET** support Scottish Universities Physics Alliance (Distinguished Visitor Programme) - £1300
Royal Astronomical Society Research Grant (summer student) - £1080
- 2011:** Royal Observatory of Belgium for the Guest Investigator programme on the PROBA2 satellite - 3500 €
Royal Astronomical Society conference travel grant (ESPM13) - £675
Royal Astronomical Society Research Grant (summer student) - £1080
Nuffield Foundation Undergraduate Research Bursaries (summer student) - £1080
- 2010:** Ogden Trust: to support the introduction of the “Physics communication in schools” module for honours physics students - £2000
Royal Astronomical Society Research Grant (summer student) - £1080
- 2009:** International Space Science Institute - £20k for leading an international team on solar prominences
Royal Society International Travel Grants 2009R2 Conference Participation to attend the 2009 Prominence Research Workshop: Observations and Models (Prague, CZ) – £442
Royal Society Conference Grants 2008/R3 to attend the Solar Image Processing Workshop IV: Algorithm comparison and effective implementation (Baltimore, USA) – £1050
- 2007:** International Space Science Institute - £20k for leading an international team on solar prominences

Other indicators of esteem

April 2017 Fellow of the Institute of Physics

Research assistants

- Ms Jessica Bownes** Transitions to PGT study – 05/2016 - 11/2016
Dr Tania Biletskaya Transitions to PGT study – 11/2015 - 03/2016
Dr Natasha Jeffrey Solar flare chromospheres and active region prominences from the optical to the EUV – 09/2014 – 09/2017
Dr Paulo Simoes Observations and modelling of chromospheric flares – 04/2014 - 12/2016

Postgraduate research students (first supervisor)

- Mr Andrew Rodger** Modelling of emission from small-scale solar structures – 10/2015
Dr Peter Levens Diagnostics of solar tornado-like prominences – 10/2013
Dr Gerrard Brown On the role of coronal illumination of solar chromospheric structures – 10/2011

Conferences

Invited talks at international conferences

- 12th Scientific Assembly of the International Association of Geomagnetism and Aeronomy, 2013, Mexico
- IAU Symposium 300 “Nature of prominences and their role in Space Weather”, 2013, France
- Solar, Heliospheric and Interplanetary Environment Workshop 2008, Utah

Conferences organised

- Royal Astronomical Society Specialist Discussion Meeting on the “Life of solar prominences” in London, 21 February 2014.
- Six international team meetings as team leader at ISSI, Bern, between 2007 and 2011
- LOC member for National Astronomy Meeting (12-16 April 2010, Glasgow)

Continuing Professional Development

- 2018:** “Kelvin News: An outreach Project by and for PGT Students” - I delivered this CPD talk for the Learning Enhancement and Academic Development Service (LEADS)
Preparing to do scholarship and writing an ethics application (UofG)
Using Moodle for Peer Review (UofG)
- 2017:** Supporting Scholarship of Teaching and Learning; CoSE L&T community event; Fire Safety Training (UofG)
Welcoming and Supporting International Students (QAA)
- 2016:** Writing for publication in higher education learning and teaching journals; Developing Your Academic Digital Footprint; PhD Supervisor Development; Learning & Teaching Conference; Public Engagement Conference; Equality and Diversity Essentials (UofG)
Postgraduate transitions - exploring disciplinary practice (HEA)
- 2015:** Leadership in Education (University College Union)
- 2014:** Communication and Media Skills (Royal Society)
- 2013:** Coaching Skills for Line Managers (University of Glasgow)
Learning from International Practice workshop (QAA)
- 2012:** International Academic Collaborations (University of Glasgow)
Developing International Research Collaborations (University of Glasgow)
Meeting the needs of Postgraduate Students (UKCGE)
- 2011:** Enhancing Learning, Teaching and Assessment in Taught Masters; Royal Society Funding Schemes (University of Glasgow)
- 2010:** MOODLE - Writing Questionnaires and using feedback (University of Glasgow)
- 2009:** Digital Media workshop: Audio Production (JISC)
Electronic classroom voting systems workshop (University of Glasgow)
- 2008:** Doing Outreach (Institute of Physics / Excite UK)
New and Aspiring Lecturer Workshop (Higher Education Academy – Physical Sciences Centre)
Programme for New or Aspiring Principal Investigators; Recruitment and Selection (University of Glasgow)

Outreach Activities

- Since 2015:** School talks
Organiser of French *Café Scientifique de Glasgow* (and since 2017 in Edinburgh)
- 2012:** Lectures for Adult Continuing Education classes
- Since 2008:** Organiser of Science Startup Masterclasses for secondary school pupils at the University of Glasgow in partnership with the Royal Society of Edinburgh
Talks to local community (amateur astronomical societies, Rotary Club, public observing evenings)
- 2007:** Contributions to FAQ section of sunearthplan.net, a website celebrating Britain’s pivotal role in space science for the International Heliophysical Year.
- 2006:** Outreach article on Black Holes for French publisher Editions Atlas

Publications

37 refereed publications (13 first author); 1 book chapter.

Peer-reviewed articles

- [37] Brown, G. M., **Labrosse, N.**, The Influence of the Solar Coronal Radiation on Coronal Plasma Structures, I: Determination of the Incident Coronal Radiation, 2018, *Solar Physics*, 293, 35
- [36] Ježič, S., Heinzl, P., **Labrosse, N.**, Zhukov, A. N., Bemporad, A., Fineschi, S., Gunár, S., Visibility of Prominences Using the He I D3 Line Filter on the PROBA-3/ASPIICS Coronagraph, 2018, *Solar Physics*, 293, 33

- [35] Levens, P. J., **Labrosse, N.**, Schmieder, B., López Ariste, A., Fletcher, L., Comparing UV/EUV line parameters and magnetic field in a quiescent prominence with tornadoes, 2017, A&A 607, A16
- [34] Schmieder, B., Zapiór, M., López Ariste, A., Levens, P., **Labrosse, N.**, Gravet, R., Reconstruction of a helical prominence in 3D from IRIS spectra and images, 2017, A&A 606, A30
- [33] Bownes, J., **Labrosse N.**, and 9 co-authors, Supporting students in the transition to postgraduate taught study in STEM subjects, 2017, Journal of Perspectives in Applied Academic Practice, 5(2), pp. 3-11.
- [32] Rodger, A. and **Labrosse, N.**, Solar prominence modelling and plasma diagnostics at ALMA wavelength, 2017, Solar Physics, 292(9), 130.
- [31] Jeffrey N., Fletcher L., **Labrosse N.**, Non-Gaussian Velocity Distributions in Solar Flares from Extreme Ultraviolet Lines: A Possible Diagnostic of Ion Acceleration, 2017, ApJ, 836, 35
- [30] Schmieder B., Mein P., Mein N., Levens P., **Labrosse N.**, Ofman L., H α Doppler shifts in a tornado in the solar corona, 2017, A&A, 597, A109
- [29] Brown S., Fletcher L., **Labrosse N.**, Doppler speeds of the hydrogen Lyman lines in solar flares from EVE, 2016, A&A, 596, A51
- [28] Levens P., Schmieder B., Lopez Ariste A., **Labrosse N.**, et al, Magnetic Field in Atypical Prominence Structures: Bubble, Tornado, and Eruption, 2016, ApJ, 826, 164
- [27] Jeffrey N., Fletcher L., **Labrosse N.**, First evidence of non-Gaussian solar flare EUV spectral line profiles and accelerated non-thermal ion motion, 2016, A&A, 590, 99
- [26] Wedemeyer S., **et al**, Solar Science with the Atacama Large Millimeter/Submillimeter Array —A New View of Our Sun, 2016, SSRv, 200, 1
- [25] **Labrosse N.** and Rodger A., Radiative transfer in cylindrical threads with incident radiation. VII. Multi-thread models, 2016, A&A, 587, 113
- [24] Levens P., Schmieder B., **Labrosse N.**, Lopez Ariste A., Structure of Prominence Legs: Plasma and Magnetic Field, 2016, ApJ, 818, 31
- [23] Wedemeyer S. **et al.**, SSALMON - The Solar Simulations for the Atacama Large Millimeter Observatory Network, 2015, AdSpR, 56, 2679
- [22] Graham D., Fletcher L., **Labrosse N.**, Determining energy balance in the flaring chromosphere from oxygen V line ratios, 2015, A&A, 584, 6
- [21] Levens P., **Labrosse N.**, Fletcher L., Schmieder B., A solar tornado observed by EIS: Plasma diagnostics, 2015, A&A, 582, 27
- [20] Schmieder B., López Ariste A., Levens P., **Labrosse N.**, Dalmasse K., 2015, Polarimetric measurements in prominences and "tornadoe" observed by THEMIS, IAUS, 305, 275
- [19] **Labrosse N.**, Hudson H., Kazachenko M., 2014, Prominences in SDO/EVE spectra: contributions from large solar structures, IAUS, 300, 439
- [18] **Labrosse N.**, 2014, Plasma properties in eruptive prominences, IAUS, 300, 79
- [17] Rubio da Costa F., Zuccarello F., Fletcher L., Romano P., **Labrosse N.**, The role of filament activation in a solar eruption, 2012, A&A, 539, A27 (11 pages)
- [16] **Labrosse N.** & McGlinchey K., Plasma diagnostic in eruptive prominences from SDO/AIA observations at 304 Å, 2012, A&A, 537, A100 (7 pages)
- [15] Hudson H. S., Woods T.N., Chamberlin P.C., Fletcher L., Del Zanna G., Didkovsky L., **Labrosse N.**, Graham D., The EVE Doppler Sensitivity and Flare Observations, 2011, Solar Physics 273, 69-80
- [14] **Labrosse N.**, Schmieder B., Heinzel P., Watanabe T., EUV lines observed with EIS/Hinode in a solar prominence , 2011, A&A, 531, A69 (11 pages)
- [13] **Labrosse N.**, Heinzel P., Vial J.-C., Kucera T., Parenti S., Gunár S., Schmieder B., Kilper G., Physics of solar prominences: I – Spectral diagnostics and non-LTE modelling, 2010, *Space Science Reviews* 151, 243-332
- [12] **Labrosse N.**, Dalla S., and Marshall S., Automatic detection of limb prominences in 304 Å EUV images, 2010, Solar Physics 262, 449-460
- [11] Rubio da Costa F., Fletcher L., **Labrosse N.**, Zuccarello F., Observations of a solar flare and filament eruption in Lyman-alpha and X-rays, 2009, A&A 507, 1005-1014
- [10] Gouttebroze P. and **Labrosse N.**, Radiative transfer in cylindrical threads with incident

radiation VI. A hydrogen plus helium system, 2009, A&A 503, 663-671

- [9] Heinzel P., Schmieder B., Fárník F., Schwartz P., **Labrosse N.**, and 8 co-authors, Hinode, TRACE, SOHO and ground-based observations of a quiescent prominence, 2008, ApJ, 686, 1383
- [8] **Labrosse N.**, Vial J.-C., and Gouttebroze P., Diagnostics of active and eruptive prominences through hydrogen and helium lines modelling, 2008, Ann. Geophys., 26, 2961-2965
- [7] **Labrosse N.**, Gouttebroze P., and Vial J.-C., Effect of motions in prominences on the helium resonance lines in the extreme ultraviolet, 2007, A&A 463, 1171–1179
- [6] **Labrosse N.**, Li X., and Li B., On the Lyman alpha and beta lines in solar coronal streamers, 2006, A&A 455, 719–723
- [5] Li B., Li X., and **Labrosse N.**, A global 2.5-dimensional three fluid solar wind model with alpha particles, 2006, J. Geophys. Res. (Space Physics), 111, 8106–8120
- [4] **Labrosse N.** and Gouttebroze, P., 2004, NLTE Radiative Transfer in Model Prominences. I. Integrated Intensities of He I Triplet Lines, ApJ 617, 614–622
- [3] **Labrosse N.** and Gouttebroze P., 2002, NLTE Diagnostics of Solar Prominences Using Hydrogen and Helium lines, Il Nuovo Cimento C, 25, 817–821
- [2] **Labrosse N.** and Gouttebroze, P., 2001, Formation of the helium spectrum in solar prominences, A&A, 380, 323–340
- [1] Gouttebroze, P. and **Labrosse N.**, 2000, A ready-made code for the computation of prominence NLTE models, Sol. Phys., 196, 349–355

Conference proceedings

- [25] Simoes P, Fletcher L, **Labrosse N.**, Kerr G., Observations and Modelling of Helium Lines in Solar Flares, 2016, ASP Conference Series, Vol. 504, p.197
- [24] Schmieder B., **et al**, Magnetic Field and Plasma Diagnostics from Coordinated Prominence Observations, 2016, ASP Conference Series, Vol. 504, p.119
- [23] Gray N., **Labrosse N.**, Honeychurch S., Draper S, Barr N., 2013, Tagging and Linking Lecture Audio Recordings: Goals and Practice, arXiv, arXiv:1311.1725
- [22] Rubio Da Costa et al., 2013, A new approach to model particle acceleration and energy transfer in solar flares, SPD, 44, #404.01
- [21] Schmieder B., Mein P., Chandra R., Molodij G., Heinzel P., Berlicki A., Schwartz P., Fárník F., **Labrosse N.**, Anzer U., Watanabe, T., 2012, Velocity Vector, Ionization Degree, and Temperature of Prominence Fine Structures Observed by Hinode/SOT, Astronomical Society of the Pacific, 2012., p.107
- [20] Rubio da Costa F., Zuccarello F., Fletcher L., **Labrosse N.**, Prosecký T., Kašparová J., 2012, Memorie della Societa Astronomica Italiana Supplement, v.19, p.117-120
- [19] Rubio da Costa F., Zuccarello F., Romano P., Fletcher L., **Labrosse N.**, 2012, Memorie della Societa Astronomica Italiana Supplement, v.19, p.113-116
- [18] Rubio da Costa F., Zuccarello F., **Labrosse N.**, Fletcher L., Prosecký, T., Kašparová, J., 2011, Solar flares: observations vs simulations, Advances in Plasma Astrophysics, Proceedings of the International Astronomical Union, IAU Symposium, Volume 274, p. 182-184
- [17] Rubio da Costa F., Fletcher L., **Labrosse N.**, Zuccarello F., 2010, Integrated Ly-alpha intensity emission in ribbon flares, Memorie della Società Astronomica Italiana Supplement, v.14, p.193
- [16] **Labrosse N.** and Gouttebroze P., 2009, Formation of Helium Lines in Solar Prominences, Recent Directions in Astrophysical Quantitative Spectroscopy and Radiation Hydrodynamics, AIP Conference Proceedings, Vol. 1171, 361-362
- [15] **Labrosse N.** and Vial J.-C., 2008, The Lyman-alpha Line in Active and Eruptive Solar Prominences, 12th European Solar Physics Meeting, Freiburg, Germany, held September, 8-12, 2008. Online at <http://espm.kis.uni-freiburg.de/>, p.3.17, 12, 3
- [14] Rubio da Costa F., Fletcher L., **Labrosse N.**, and Zuccarello F., 2008, Investigation of Ly- α Emission in a Solar Flare, 12th European Solar Physics Meeting, Freiburg, Germany, held September, 8-12, 2008. Online at <http://espm.kis.uni-freiburg.de/>, p.2.64, 12, 2
- [13] **Labrosse N.**, Schmieder B., Heinzel P., and Gunár S., 2008, Solar Prominence Diagnostic with Hinode/EIS, 12th European Solar Physics Meeting, Freiburg, Germany, held September, 8-

12, 2008. Online at <http://espm.kis.uni-freiburg.de/>, p.2.21, 12, 2

[12] **Labrosse N.**, Gouttebroze P., and Vial J.-C., 2006, Spectral Diagnostics of Active Prominences, Proceedings of the Coimbra Solar Physics Meeting: The Physics of the Solar Chromosphere, ASP Conf. Series vol. 368, Eds: P. Heinzel, I. Dorotovic and R.J. Rutten, p. 337–342

[11] **Labrosse N.**, Morgan H., Habbal S. R. and Brown D., 2006, O VI and H₂ Lines in Sunspots, Proceedings of the Coimbra Solar Physics Meeting: The Physics of the Solar Chromosphere, ASP Conf. Series vol. 368, Eds: P. Heinzel, I. Dorotovic and R.J. Rutten, p. 247–250

[10] **Labrosse N.**, Vial J.-C., and Gouttebroze P., 2006, The Helium Spectrum in Erupting Solar Prominences, Solar Active Regions and 3D Magnetic Structure, 26th meeting of the IAU, Joint Discussion 3, 16-17 August, 2006, Prague, Czech Republic, JD03, #47, 3

[9] **Labrosse N.**, Vial J.-C., and Gouttebroze P., 2006, Plasma diagnostic of a solar prominence from hydrogen and helium resonance lines, in 'SF2A-2006: Semaine de l'Astrophysique Française', D. Barret et al. (eds)

[8] **Labrosse N.**, Li X., and Li B., 2006, The Lyman alpha and Lyman beta lines in solar coronal streamers, in 'SOHO-17: 10 Years of SOHO and Beyond', ESA SP-617

[7] **Labrosse N.**, Gouttebroze P., and Vial J.-C., 2006, The Helium spectrum in moving solar prominences, in 'SOHO-17: 10 Years of SOHO and Beyond', ESA SP-617

[6] **Labrosse N.**, Li X., Habbal S. R., Gouttebroze P., and Mountford C. J., 2002, Radiative transfer effects on hydrogen (and helium) in the solar atmosphere, in ESA SP-506: Solar Variability: From Core to Outer Frontiers, 13–15

[5] **Labrosse N.**, Gouttebroze P., Heinzel P., and Vial J.-C., 2002, Line profiles and intensity ratios in prominence models with a prominence to corona interface, in ESA SP-506: Solar Variability: From Core to Outer Frontiers, 451–454

[4] Gouttebroze P., **Labrosse N.**, Heinzel P., and Vial J.-C., 2002, Prediction of line intensity ratios in solar prominences, in "Magnetic Coupling of the Solar Atmosphere", ed. H. Sawaya-Lacoste (ESA SP-505)

[3] Gouttebroze P. and **Labrosse N.**, 1999, Transfert de rayonnement à l'IAS, in "Transfert de Rayonnement en Astrophysique", ed. P. Stee (Observatoire de la Côte d'Azur), 160

[2] **Labrosse N.**, Gouttebroze P., and Vial J.-C., 1999, Modelling of Helium Spectrum in Solar Prominences, in "9th European Meeting on Solar Physics: Magnetic Fields and Solar Processes", ed. A. Wilson (ESA SP-448), 503–506

[1] **Labrosse N.** and Gouttebroze P., 1999, Helium Spectrum in Solar Prominences, in "Plasma dynamics and diagnostics in the solar transition region and corona", ed. J.-C. Vial and B. Kaldeich-Schurmann (ESA SP-446), 399

Book chapters

[1] **Labrosse N.**, 2015, Derivation of the Major Properties of Prominences Using NLTE Modelling, in Solar Prominences, Astrophysics and Space Science Library, Volume 415. ISBN 978-3-319-10415-7. Springer International Publishing Switzerland, 2015, p. 131

Book reviews

[5] **Labrosse N.**, 2011, "Observational Exercises in Astronomy", Reviews, Vol 12, 1, 57

[4] **Labrosse N.**, 2010, "Did Time Begin? Will Time End?", Reviews, Vol 11, 1, 15

[3] **Labrosse N.**, 2009, "Planets and Planetary Systems", Reviews, Vol 10, 2, 43

[2] **Labrosse N.**, 2009, "Working One-to-One with Students: supervising, coaching, mentoring and personal tutoring", Reviews, Vol 9, 2, 47-48

[1] **Labrosse N.**, 2008, "Astrophysics: Decoding the Cosmos", Reviews, Vol 9, 1, 4

PhD thesis

Labrosse N., 2001, Modélisation du spectre de l'hélium dans les protubérances solaires, Thèse de Doctorat, Université Paris XI