

Curriculum Vitae

Full Name: Dominique Gilles SLUSE

Date and place of birth: October 27, 1977 in Liège (Belgium)

| Professional address: | Personal address: | Contacts |
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| Université de Liège Allée du 6 août, 17 - Bât. B5c B-4000 Liège Belgium | Rue du Ruisseau 39 B-4100 Seraing Belgium | Office ☎: +32 (0)4 366 97 97 Private ☎: +32 (0)4 385 12 00 Email: dsluse@ulg.ac.be |

Education:

- 25.04.2005: PhD Thesis in Physical Science (Thesis supervisor: Prof. J. Surdej (Ulg))
10.09.1999: Graduation in Physical Science (Masters Degree), Ulg (Masters Thesis with Prof. J. Surdej)
30.06.1997: Physical Science: Completion of the first two years (“Candidature”) at University of Liège (Ulg - Belgium)
30.06.1995: End of secondary school (Athénée Royal de Chênée - Belgium)

Positions:

- Sep. 2014 – present: *Research collaborator* at Ulg (BELSPO “Back to Belgium” grant award)
Jul. 2011 – Aug. 2014: *Research collaborator* at AIfA, U. Bonn (DFG research grant)
Sep. 2010 – Jun. 2011: *Research collaborator* at ARI-ZAH, U. Heidelberg, Germany
Sep. 2008 – Aug. 2010: *Humboldt fellow* at ARI-ZAH, U. Heidelberg, Germany
Jun. 2005 – Aug. 2008: *Research collaborator* at EPFL, Switzerland.
Mar. 2003 – May 2005: *PRODEX studentship*. Full time research at ULg, Belgium.
Jan. 2001 – Feb. 2003: *ESO studentship* at ESO Chile.
Sep. 1999 – Dec. 2000: *PRODEX studentship*. Full time research at ULg, Belgium

Main professional achievements:

- 51 refereed papers (13 as first author, 8 as second author) in journals with peer reviewing.
- Awards: DFG research grant, Alexander von Humboldt fellowship, BELSPO “Back to Belgium” grant, ESO studentship.
- Principal Investigator (resp. Co-Investigator) of 8 (resp. 21) allocated observing programmes at ESO, including one *large programme*.
- Visiting astronomer: 6 observing runs at ESO (la Silla+Paranal) and 20 nights at the Mercator belgian telescope in La Palma.
- Press releases associated to six publications (Discovery of the closest lensed quasar, 2003; Discovery of the first triple quasar, 2007; Probing a quasar accretion disc with microlensing, 2008; Unusual Cosmic lens, 2010; Quasars acting as gravitational lenses, Mar. 2012; Spooky Alignment of Quasars, Nov. 2014).

Last year main researches:

- Theory of gravitational lensing
- Study of dark matter distribution in galaxies using gravitational lensing.
- Study of the structure of Active Galactic Nuclei using cosmic microlensing.

Experience:

Computer science: Experienced programmer under Python. Basic programming in C/C++, FORTRAN 77, html. Advanced knowledge of Linux, MacOs and Windows operating systems. Daily usage of multiple Office tools (Microsoft Word, Powerpoint, Excel, L^AT_EX, Evernote, Open Office) and of version control tools (Git, SVN).

Soft Skills: Analysing and solving problems, Communicating results in oral and written form, Work in group, Project management, Writing funding proposals.

Languages: French (native) - English (fluent) - Spanish (B1) - German (A2)

Image processing and data reduction: Extensive experience of CCD astronomical data processing (using IRAF, MIDAS, Python and home made scripts), including images obtained with ground based (FORS1-2, EMMI, SUSI, EFOSC2, SOFI, ISAAC, CFHT-IR) and space based telescopes (HST WFPC2, NICMOS, ACS) and long slit spectra (EMMI, FORS2, SOFI, ISAAC, X-SHOOTER), Integral Field Spectroscopy (GIRAFFE, SINFONI, MUSE @ VLT) and Adaptive Optic imaging (NACO+LGS @ VLT).

Astronomical observations: Extensive experience in the acquisition of optical and NIR imaging, of optical and NIR spectra, of polarimetric imaging and spectroscopy. Involved in the commissioning of the new NTT EMMI camera in May 2002. Experience of service observing, astronomer support and test night at the NTT (NTT student: 2001-2002). Preparation of Phase 2 material in imaging and spectroscopy. 20 nights of imaging observation with the Mercator belgian telescope in La Palma.

Teaching experience:

- Invited lecturer for the course of “gravitational lensing” of Prof. Dr. P. Schneider.
- Teaching assistant for the courses of “Introduction to Astrophysics” and of “The physics of astrophysics” at the Polytechnical school of Lausanne - EPFL (2007, 2008).
- External expert for the examination of ”Nuclear Physics (I and II)” (2007-2008).
- Public Outreach Activities for Liège Astronomical Society, for astronomy training groups, for secondary and primary schools.

Main accepted observing proposal

ESO:

- P97: High precision cosmology with the lensed quasar WFI2033-4723 (**PI**): 3h on MUSE.
- SV: A multi-scale study of time-delay lensed quasars (**PI**): 2h Science verification data with MUSE.
- P94: Probing the structure of the broad line region and the accretion disk in the HE0435-1223 quadruply imaged quasar using gravitational microlensing (CoI): 8h on FORS2, 7 hrs on SINFONI.
- P94: Recovering disappeared broad absorption lines in quasars (CoI): 16h on FORS2.
- P94: A Pilot VLT Monitoring of a Lensed Quasar: Time-delay Cosmography in the Euclid/LSST Era (CoI): 30h on FORS2.
- P92: Spectroscopic study of the environment of the time-delay lens HE1104-1805 (**PI**): 4h with FORS2.
- P92: The Ly α envelope of the radio-quiet quasar J1240+1455: nature and kinematics from polarimetry (CoI): 20h on FORS2.
- P91: Spectroscopic environment of two time-delay lenses for accurate cosmology (**PI**): 10h with FORS2.
- P90: Determining the broad line region kinematics and the accretion disc temperature profile in quasars using microlensing. (CoI): 22h with X-SHOOTER.
- P86: Determining the temperature profile of the accretion disk in the gravitationally lensed Broad Absorption Line quasar H1413+117 with microlensing. (CoI): 10h with SINFONI+FORS2.
- P85: Characterizing the size and geometry of the quasar emission line regions in the actively micro-lensed system RXS J1131–1231 (**PI**): 23h with FORS2
- P79+P84+P85: A deep and sharp look, with adaptive optics, at massive substructures in lensing galaxies (CoI): 2.8h+24h+16h with NACO.
- P84: The radial mass profile of the galaxy lensing a quasar: Gravitational lensing vs Dynamics (CoI): 30h with FORS2
- P83: What is the nature of the Weak Emission Line Quasars ? (**PI**): 1h with X-SHOOTER (Science Verification)
- P81-P84: Probing the broad line and the FeII emitting region of a quasar with microlensing: a spectrophotometric monitoring of the gravitational lens system J1131–1231 (**PI**): 71h with FORS2 (Large programme).
- P80: Extreme scale alignments of quasar polarisation vectors: evidence for photon-pseudoscalar mixing on cosmological scales ? (CoI); 5n with EFOSC2.
- P79: A new observational test toward the evolution of AGN narrow-line region through gravitational lensing (CoI): 13h with SINFONI.
- P78+P79: Extreme scale alignments of quasar polarisation vectors: evidence for photon-pseudoscalar mixing on cosmological scales ? (CoI); 5n+5n with EFOSC2.
- P73: GIRAFFE observations in ARGUS mode of the multiply imaged quasar 1RXS J113155.4-123155 (CoI); 10h with GIRAFFE.

- P71: Observations of a new gravitationally lensed quasar at z=0.65 (**PI**): 10h with FORS2 + ISAAC.
- P71+P72: Mapping extreme-scale structure in the Universe with quasar polarisation. The SGP region (CoI); 3n+3n with EFOSC2.
- P69: Is there a correlation in the orientation of quasars in pairs separated by less than 50 Mpc (**PI**): 2 n with EFOSC2 (DDT).

HST:

Cycle 18: Strong gravitational lensing by quasars (CoI).

Chandra:

Cycle 5: Towards a microlensing mapping of an accretion disk (CoI).

Magellan:

2012B: Microlensing, galactic extinction and flux ratios in quadruply imaged lensed quasars (CoI).

Gemini:

- 2014A: Reverberation Mapping of a Gravitationally-lensed Quasar (CoI)
- 2013A: Spectroscopic study of the environment of two time-delay lenses for accurate cosmology (CoI)
- 2004A-2005A: Integral Field Spectroscopy of the multiply-imaged quasar RXS J113155.4-123155 (CoI).

ALMA:

Cycle 2: Constraining H_0 with ALMA imaging of the gravitationally lensed quasar RXJ1131-1231 (CoI)

VLA and eMerlin:

- 2014: The gravitationally-lensed radio quiet quasar HS0810+2554 (CoI; e-Merlin).
- 2013: Radio-”quiet” quad lenses and CDM substructure in galaxies (CoI; e-Merlin).
- 2012: Using gravitational lensing to probe CDM substructure in galaxies (CoI; VLA).
- 2007: A Radio image of the first triple quasar system (CoI; VLA).
- 2003: Multi-Resolution VLA Observations of the Nearest Gravitationally Lensed Quasar (CoI; VLA).

Main conferences and schools:

- From theory to applications: celebrating a century of gravitational lensing (July 11th-15th 2016; Leiden (Netherlands)).
- LSST-Europe meeting (June 20-24 2016; Belgrade (Serbia)).
- Euclid Consortium meeting (May 30th-June 3rd 2016; Lisboa (Portugal)).

- TORUS2015 Workshop (Sept. 14-17 2015; Winchester (United Kingdoms)).
- SCSLSA10 - Serbian Conference on Spectral Line Shapes in Astrophysics (Jun 15-16 2015, Srebreno jezero (Serbia)).
- Euclid Consortium meeting (June 8-12 2015; Lausanne (Switzerland))
- 2nd COST workshop on Polarization and Active Galactic Nuclei (May 11-12 2015; Strasbourg (France))
- Alma Community days (Nov 5-6 2013; Bonn (Germany))
- COSMOPROBE 2013: More than the sum of all parts: Complementarity of cosmological probes (Jun 24-26 2013; Lausanne (Switzerland))
- The Modern radio Universe (Apr. 22-26 2013; Bonn (Germany))
- Seyfert 2012: Nuclei of Seyfert galaxies and QSOs - Central engine & conditions of star formation (Nov. 6-8 2012; Bonn (Germany))
- Polarization and AGNs (Oct. 16-17 2012; Brussels (Belgium))
- Alma Community days (June 5-6 2012; Bonn (Germany))
- SNOWPAC 2012: Gravitational Lensing in the Age of Survey Science (Mar 19-23 2012; Salt-Lake City (USA))
- Strong gravitational lensing: from stars to dark matter haloes (June 20-24 2011; Courmayeur (Italy))
- Three decades of gravitational lenses - Symposium at JENAM (April 20-23 2009; Hertfordshire (England))
- ESO workshop on Large Programmes (October 13-15 2008; Garching (Germany))
- The 38th Saas-Fee Course on Submm astronomy (March 3-8 2008; Les Diablerets (CH))
- The 12th International Conference and ANGLES Microlensing Workshop (January 21-25 2008; Manchester (England))
- The nuclear region, host galaxy and environment of Active Nuclei (April 18-20 2007; Huatulco (Mexico))
- Third ANGLES school on gravitational lensing held in Valencia (March 27-30 2007; Valencia (Spain))
- XXVIth Astrophysics Moriond Meeting: From dark halos to light (March 12-18, 2006; La Thuile (France))
- 25 years after the discovery: some current topics on lensed QSOs: GL Workshop 2004 (December 15-17 2004; Santander (Spain))
- Impact of gravitational lensing on cosmology: IAU Symposium 225 (July 19-23 July; Lausanne (Switzerland))
- Gravitational Lensing: a unique tool for cosmology (January 5-11, 2003; Aussois (France))
- Structure evolution and cosmology (28-31 October 2002; Santiago (Chile))
- Interferometry week (January 14-16 2002; Santiago (Chile))
- Data processing from Chandra and XMM-Newton Space Missions (December 4-13 2001; Sao-José Dos Campos (Brasil))

List of oral presentation in conferences

- Scattered continuum light in AGN on the accretion disc size from microlensing (Leiden 2016)
- Imprints of the AGN structure on time delay light curves in LSST era (Belgrade, 2016)
- What can we learn about quasars and unification scheme with the microlensing technique ? (Winchester, 2015)
- Measuring the size of the broad line region in quasars with Microlensing-aided reverberation mapping (Srebreno jezero, 2015)
- QUASARPOL: A catalog of quasar linear polarisation data (Strasbourg, 2015)
- Lensing degeneracies (Stanford, 2014)
- The dark matter content of galaxies from gravitational lensing (Brussels, 2014)
- Probing the inner structure of AGNs with gravitational lensing (Bonn, 2012)
- Optical circular polarisation of quasars (Brussels, 2012)
- New insights on the quasars central region from microlensed quasars (Snowpac/Salt-lake City, 2012)
- What can we learn about strongly lensed quasars through microlensing ? (Courmayeur, 2011)
- Microlensing as a tool to probe the quasar structure (Hertfordshire, 2009)
- Microlensing to probe the quasar structure: spectrophotometry of Q2237+0305 and of J1131–1231 (Manchester, 2008)
- Microlensing probes the AGN structure of the lensed quasar J1131–1231 (Huatulco, 2007).
- Multi-wavelength and multi-epoch imaging of J1131–1231: a flux ratio anomaly ? (Santander, 2004).
- Discovery of a quadruply imaged quasar surrounded by a ring (Aussois, 2003).

Commissions of trust:

- 2012-present: Master thesis committee: J. Biernaux (2014), C. Delvaux (2013), L. Braibant (2012)
- 2012-present: PhD thesis committee: V. Pelgrims (Ulg, 2015), G. Vernardos (Swinburne University, Australia, 2015), E. Eulaers (Ulg, 2012), B. Borguet (Ulg, 2011)
- 2006-present: Referee for major referee journals: Nature, ApJ, A&A, MNRAS, PASJ
- 2015: Member of the ESO OPC (Observing Program Committee)
- 2014-present: Occasional reviewer for proposals funded by the Polish National Center
- 2012-2014: Organiser of the strong-lensing seminar at AIfA.
- 2008-2009: Organiser of the 'Application of light deflection' seminar at ARI.
- 2005-2008: Organiser of the Journal Club at the Laboratory of Astrophysics of EPFL.
- 2003-2005: Elected member of the Departmental Council of the Astrophysical, Geophysical and Oceanography Department, Ulg.

Memberships of scientific societies:

- Member of International Astronomical Union
- Member of IAU Division B, Commission B3 Astroinformatics and Astrostatistics
- Member of IAU Division D, High Energy Phenomena and Fundamental Physics
- Member of IAU Division J, Galaxies and Cosmology
- Member of IAU cross division D-J, Commission Supermassive Black Holes, Feedback and Galaxy Evolution

Publication list

- [1] V. Bonvin, F. Courbin, S. H. Suyu, P. J. Marshall, C. E. Rusu, D. Sluse, et al., **2016**, MNRAS, submitted, H0LiCOW V. New COSMOGRAIL time delays of HE0435-1223: H_0 to 3.8% precision from strong lensing in a flat Λ CDM model. [arXiv:1607.01790](https://arxiv.org/abs/1607.01790)
- [2] K. C. Wong, S. H. Suyu, M. W. Auger, V. Bonvin, F. Courbin, et al. (incl. D. Sluse), **2016**, MNRAS, submitted, H0LiCOW IV. Lens mass model of HE 0435-1223 and blind measurement of its time-delay distance for cosmology. [arXiv:1607.01403](https://arxiv.org/abs/1607.01403)
- [3] C. E. Rusu, C. D. Fassnacht, D. Sluse, S. Hilbert, K. C. Wong et al., **2016**, MNRAS, submitted, H0LiCOW III. Quantifying the effect of mass along the line of sight to the gravitational lens HE 0435-1223 through weighted galaxy counts. [arXiv:1607.01047](https://arxiv.org/abs/1607.01047)
- [4] D. Sluse, A. Sonnenfeld, N. Rumbaugh, C. E. Rusu, C. D. Fassnacht et al. **2016**, MNRAS, submitted, H0LiCOW II. Spectroscopic survey and galaxy-group identification of the strong gravitational lens system HE0435-1223. [arXiv:1607.00382](https://arxiv.org/abs/1607.00382)
- [5] S. H. Suyu, V. Bonvin, F. Courbin, C. D. Fassnacht, C. E. Rusu, D. Sluse et al. **2016**, MNRAS, submitted, H0LiCOW I. H_0 Lenses in COSMOGRAIL's Wellspring: Program Overview. [arXiv:1607.00017](https://arxiv.org/abs/1607.00017)
- [6] S. Unruh, P. Schneider, D. Sluse, **2016**, A&A, submitted, Ambiguities in gravitational lens models: the density field from the source position transformation. [arXiv:1606.04321](https://arxiv.org/abs/1606.04321)
- [7] L. Braibant, D. Hutsemékers, D. Sluse, T. Anguita, **2016** A&A, 592, A23, The different origins of high- and low-ionization broad emission lines revealed by gravitational microlensing in the Einstein cross
- [8] V. Bonvin, M. Tewes, F. Courbin, T. Kuntzer, D. Sluse, G. Meylan **2016** A&A, 585, A88, accepted, COSMOGRAIL: the COSmological MOnitoring of GRAVItational Lenses XV. Assessing the achievability and precision of time-delay measurements.
- [9] J. Biernaix, P. Magain, D. Sluse, V. Chantry **2016** A&A, 585, A84 Analysis of luminosity distributions and shape parameters of strong gravitational lensing elliptical galaxies.
- [10] D. Xu, D. Sluse, P. Schneider, V. Springel, M. Vogelsberger, D. Nelson, L. Hernquist, **2016** MNRAS, 456, 739, Lens galaxies in the Illustris simulation: power-law models and the bias of the Hubble constant from time-delays.
- [11] D. Hutsemékers, D. Sluse, L. Braibant, T. Anguita, **2015** A&A, 584, A61, Polarization microlensing in the quadruply imaged broad absorption line quasar H1413+117.
- [12] D. Sluse, D. Hutsemékers, T. Anguita, L. Braibant, P. Riaud **2015** A&A, 582, A109, Evidence for two spatially separated UV continuum emitting regions in the Cloverleaf broad absorption line quasar.
- [13] N. Jackson, A.S. Tagore, C. Roberts, D. Sluse, H. Stacey, H. Vives-Arias, O. Wucknitz, F. Volino **2015** MNRAS, 454, 287, Observations of radio-quiet quasars at 10 mas resolution by use of gravitational lensing.
- [14] D. Xu, D. Sluse, L. Gao, J. Wang, C. Frenk, S. Mao, P. Schneider, V. Springel **2015** MNRAS, 447, 3189, How well can cold-dark-matter substructures account for the observed lensing flux-ratio anomalies ?
- [15] D. Sluse, M. Tewes **2014**, A&A, 571, A60, Imprints of the quasar structure in time delay light curves: Microlensing-aided reverberation mapping.

- [16] D. Hutsemékers, L. Braibant, V. Pelgrims, **D. Sluse** **2014** A&A, 572, A18, Alignment of quasar polarizations with large-scale structures.
- [17] L. Braibant, D. Hutsemékers, **D. Sluse**, T. Anguita, C. Garcia-Vergara, **2014**, A&A, 565, L11, Microlensing of the broad line region in the quadruply imaged quasar HE0435-1223
- [18] P. Schneider, **D. Sluse** **2014** A&A, 564, A103, Source-position transformation – an approximate invariance in strong gravitational lensing
- [19] P. Schneider, **D. Sluse** **2013** A&A, 559, A37, Mass-sheet degeneracy, power-law models and external convergence: Impact on the determination of the Hubble constant from gravitational lensing
- [20] M. Tewes, F. Courbin, G. Meylan, et al. (incl. **D. Sluse**), **2013**, A&A, 556, A22, COSMOGRAIL XII: Time delays and 9-yr optical monitoring of the lensed quasar RX J1131–1231
- [21] **D. Sluse**, M. Kishimoto, T. Anguita, O. Wucknitz, J. Wambsganss **2013**, A&A, 553, A53, Mid-infrared microlensing of the dusty torus and accretion disc in quasars: consequences for flux ratio anomalies
- [22] S.H. Suyu, M.W. Auger, S. Hilbert et al. (incl. **D. Sluse**) **2013**, ApJ 766, 70, Two accurate time-delay distances from strong lensing: Implications for cosmology
- [23] C. E. Rusu, M. Oguri, M. Iye et al. (incl. **D. Sluse**), **2013**, ApJ 765, 139, The quasar-galaxy cross SDSS J1320+1644: A probable large-separation lensed quasar
- [24] **D. Sluse**, D. Hutsemékers, F. Courbin, G. Meylan, G., J. Wambsganss, **2012**, A&A 544, 62, Microlensing of the broad line region in 17 lensed quasars.
- [25] F. Courbin, C. Faure, S.G. Djorgovski, et al. (incl. **D. Sluse**) **2012**, A&A 540, 36, Three quasi-stellar objects acting as strong gravitational lenses.
- [26] **D. Sluse**, V. Chantry, V., P. Magain, F. Courbin, F., G. Meylan **2012**, A&A 538, 99, COSMOGRAIL: the COSmological MONitoring of GRAVItational Lenses. X. Modeling based on high-precision astrometry of a sample of 25 lensed quasars: consequences for ellipticity, shear, and astrometric anomalies.
- [27] F. Courbin, F., V. Chantry, Y. Revaz, **D. Sluse**, D et al. **2011**, A&A 536, 53, COSMOGRAIL: the COSmological MONitoring of GRAVItational Lenses. IX. Time delays, lens dynamics and baryonic fraction in HE 0435–1223.
- [28] C. Faure, **D. Sluse**, N. Cantale, et al. **2011**, A&A, 536, 29, VLT adaptive optics search for luminous substructures in the lens galaxy towards SDSS J0924+0219.
- [29] **D. Sluse**, R. Schmidt, R., F. Courbin et al. **2011**, A&A, 528, 100, Zooming into the broad line region of the gravitationally lensed quasar QSO 2237+0305 the Einstein Cross. III. Determination of the size and structure of the C_{IV} and C_{III}] emitting regions using microlensing
- [30] V. Chantry, **D. Sluse**, P. Magain **2010**, A&A, 522, 95, COSMOGRAIL: the COSmological MONitoring of GRAVItational Lenses VIII. Deconvolution of high resolution near-IR images for 7 gravitationally lensed quasars and simple mass models.
- [31] D. Hutsemékers, B. Borguet, **D. Sluse**, R. Cabanac, H. Lamy, **2010**, A&A, 520, L7, Optical Circular polarisation in quasars
- [32] D. Hutsemékers, B. Borguet, **D. Sluse**, P. Riaud, T. Anguita **2010**, A&A, 519, 103, Microlensing in H1413+117: Disentangling line profile emission and absorption in a Broad

- Absorption Line quasar.
- [33] F. Courbin, M. Tewes, S. G. Djorgovski, **D. Sluse**, G. Meylan, A. Mahabal, F. Rerat, **2010**, A&A, 516, 12, First Case of Strong Gravitational Lensing by a Quasar : SDSS J0013 +1523, at z = 0.120.
 - [34] J. Surdej, C. Delacroix, P. Coleman et al. (incl. **D. Sluse**) **2010**, AJ, 139, 1935: The Optical Gravitational Lens Telescope.
 - [35] **D. Sluse**, F. Courbin, A. Eigenbrod, G. Meylan **2008**, A&A, 492, L39: A sharp look at the gravitationally lensed quasar SDSS J0806+2006 with laser guide star adaptive optics at the VLT.
 - [36] A.J. Castro-Tirado, A. de Ugarte Postigo, J. Gorosabel et al. (incl. **D. Sluse**) **2008**, Nature, 455, 506: Flares from a candidate Galactic magnetar suggest a missing link to dim isolated neutron stars.
 - [37] C. Vuissoz, F. Courbin, **D. Sluse** et al. **2008**, A&A, 488, 481: COSMOGRAIL: the COSmological MONitoring of GRAVItational Lenses VII. Time delays and the Hubble constant from WFI J2033–4723.
 - [38] A. Eigenbrod, F. Courbin, **D. Sluse**, G. Meylan, E. Agol **2008**, A&A, 480, 647: Microlensing variability in the gravitationally lensed quasar Q2237+0305 ≡ the Einstein Cross: I. Spectrophotometric monitoring with the VLT.
 - [39] S.G. Djorgovski, F. Courbin, G. Meylan, **D. Sluse**, D. Thompson, A. Mahabal, E. Glikman **2007**, ApJ, 662, L1: Discovery of a Probable Physical Triple Quasar.
 - [40] **D. Sluse**, J.-F. Claeskens, D. Hutsemékers, J. Surdej **2007**, A&A, 468, 885: Multi-wavelength study of the gravitational lens system RXS J1131–1231. III. Long slit spectroscopy: micro-lensing probes the QSO structure.
 - [41] C. Vuissoz, F. Courbin, **D. Sluse**, et al. **2007**, A&A, 464, 845: COSMOGRAIL: the COSmological MONitoring of GRAVItational Lenses. V. The time delay in SDSS J1650+4251.
 - [42] J-F. Claeskens, **D. Sluse**, P. Riaud, J. Surdej **2006**, A&A, 451, 865: Multi- λ study of the gravitational lens system RXS J1131–1231. II. Lens model and source reconstruction.
 - [43] A. Eigenbrod, F. Courbin, S. Dye, G. Meylan, **D. Sluse**, C. Vuissoz, P. Magain **2006**, A&A, 451, 747: COSMOGRAIL: the COSmological MONitoring of GRAVItational Lenses. II. SDSS J0924+0219: the redshift of the lensing galaxy, the quasar spectral variability and the Einstein rings.
 - [44] **D. Sluse**, J-F. Claeskens, B. Altieri, R. Cabanac, O. Garbet et al. **2006**, A&A, 449, 539: Multi-wavelength study of the gravitational lens system RXS J113155.4–123155. I. Multi-epoch optical and near infrared imaging.
 - [45] P. Saha, F. Courbin, **D. Sluse**, S. Dye, G. Meylan **2006**, A&A, 450, 461: Models of prospective time-delay lenses.
 - [46] D. Hutsemékers, R. Cabanac, H. Lamy, **D. Sluse** **2005**, A&A, 441, 915: Mapping extreme-scale alignments of quasar polarisation vectors.
 - [47] **D. Sluse**, D. Hutsemékers, H. Lamy, R. Cabanac, H. Quintana **2005**, A&A, 433, 757: New optical polarisation measurements of quasi stellar objects: the data.
 - [48] **D. Sluse**, J. Surdej, J-F. Claeskens et al. **2003** A&A, 406, 43, A quadruply imaged quasar with an optical Einstein ring candidate: 1RXS J113155.4–123155.

- [49] **D. Sluse**, J. Surdej, J.-F. Claeskens et al. **2003**, A&A, 397, 539: Close pairs of quasars with different redshifts: new observations and results.
- [50] J.-F. Claeskens, S. Khmil, D.W. Lee, **D. Sluse**, J. Surdej **2001**, A&A, 367, 748: HST and ground based observations of the gravitational lens system Q1009–0252 A & B.
- [51] J.-F. Claeskens, D.W. Lee, M. Remy, **D. Sluse**, J. Surdej **2000**, A&A, 356, 840: QSO mass constraints from gravitational lensing studies of quasar pairs: The case of Q1548+114 A & B and Q1148+0055 A & B.

Publications without a peer-reviewing:

- [1] **D. Sluse** et al., 2012, Proceedings of the Seyfert 2012 conference, Probing the inner structure of distant AGNs with gravitational lensing.
- [2] M. Tewes, F. Courbin, G. Meylan, G. et al. (incl. **D. Sluse**), **2012** The Messenger 150, 49.
- [3] D. Hutsemékers, A. Payez, A., R. Cabanac, H. Lamy, **D. Sluse** et al., **2011** ASP Conference Series, Vol. 449. San Francisco: Astronomical Society of the Pacific, p.441, Large-Scale Alignments of Quasar Polarisation Vectors: Evidence at Cosmological Scales for Very Light Pseudoscalar Particles Mixing with Photons ?
- [4] J.-F. Claeskens, **D. Sluse**, J. Surdej, **2010**, Proceedings of 41st ESLAB Symposium, p191. The Impact of HST on European Astronomy: HST observations of gravitationally lensed QSOs
- [5] A. de Ugarte Postigo, et al. (incl. **D. Sluse**), **2010**, Highlights of Spanish Astrophysics V, Astrophysics and Space Science Proceedings, p399, SWIFT J195509+261406: Dramatic Flaring Activity from a New Galactic Magnetar
- [6] A. de Ugarte Postigo, et al. (incl. **D. Sluse**), **2008**, AIPC, 1000, 337, GRB 070610: Flares from a peculiar Galactic source
- [7] **D. Sluse** et al., 2008, Proceedings of the Manchester Microlensing Conference, Microlensing to probe the quasar structure: spectrophotometry of Q2237+0305 and of J1131–1231
- [8] A. Eigenbrod, F. Courbin, **D. Sluse** et al., **2008**, Proceedings of the Manchester Microlensing Conference, Microlensing variability in the gravitationally lensed quasar QSO 2237+0305 = the Einstein Cross
- [9] J. Surdej et al. (incl. **D. Sluse**), **2008**, AIPC, 1038, 173, Gravitational Lensing, Dark Matter and the Optical Gravitational Lens Experiment
- [10] **D. Sluse**, J.-F. Claeskens, D. Hustsemékers, J. Surdej, **2007**, published in RevMexAA (Serie de Conferencias), 32, 83, eds Benitez, Cruz-Gonzalez, Krongold: Microlensing probes the AGN structure of the lensed quasar J1131–1231.
- [11] J. Surdej, J.-F. Claeskens, **D. Sluse**, Gravitational lensing and anomalous redshifts, **2006**, in current issues in Cosmology, Eds J.V. Narlikar, J.-C. Pecker
- [12] R. Cabanac, D. Hutsemékers, **D. Sluse**, H. Lamy **2005**, ASP Conference Series, 343, 498, Large scale correlations of quasar polarisation vectors ; Hints of extreme scale structure ?
- [13] **D. Sluse**, J.-F. Claeskens, D. Hustsemékers, C. Jean, S.V. Khmil, J. Surdej, **2004**, ASP Conference Series Vol 326, eds D. Valls-Gabaud and J.-P. Kneib, Discovery of a quadruply imaged quasar surrounded by a ring.

Press Releases

- ESO Press Release 1438: Spooky Alignment of Quasars Across Billions of Light-years
- HST-Stsci 03/2012: Astronomers Using NASA's Hubble Discover Quasars Acting as Gravitational Lenses.
- EPFL-Caltech Press Release 07/10: Astronomers discover an unusual cosmic lens.
- ESO Press Release 12/08: Astronomers dissect a supermassive black hole with natural magnifying glass.
- ESO Press Release 02/07: It's no mirage! Large Telescopes Team Up to Help Astronomers Discover a Trio of Quasars (Also Keck, Caltech and EPFL press releases).
- ESO Press Release 19/03: Nearest Cosmic Mirage: Discovery of a quadruply lensed quasar with an Einstein ring.