

# Liste des publications

Marcel Carbillot

[Au 13 décembre 2017]

199 références bibliographiques, dont 44 articles dans des journaux scientifiques, 9 communications « invité », 100 autres articles de conférence (dont 50 SPIE et 10 AO4ELT), 20 autres communications publiées, 6 autres communications non publiées, 14 rapports, 2 thèses, 2 circulaires IAU et 2 catalogues stellaires.

(Les dernières versions délivrées des 3 composantes principales de la suite logiciel CAOS de modélisation de systèmes d'optique adaptative (OA) et de reconstruction d'images post-OA sont indiquées en annexe.)

## — Revues à comité de lecture

(35 articles standards dont 2 soumis, 4 lettres, 1 research note, 1 erratum)

1. “Probability imaging of a few double stars from near-infrared one-dimensional speckle data”, M. Carbillot, G. Ricort, C. Aime, Ch. Perrier, *Astron. Astrophys.* **310**, 508 (1996).
2. “Discovery of a new bright close double star” (*Research Note*), M. Carbillot, B. Lopez, É. Aristidi, Y. Bresson, C. Aime, G. Ricort, J.-L. Prieur, L. Koechlin, G. Helmer, J. Lefèvre, P. Cruzalèbes, *Astron. Astrophys.* **314**, 122 (1996).
3. “Imaging binary stars by the cross-correlation technique”, É. Aristidi, M. Carbillot, J.-F. Lyon, C. Aime, *Astron. Astrophys. Suppl. Ser.* **125**, 139 (1997).
4. “ICCD speckle observations of binary stars : measurements during 1994–1995”, É. Aristidi, M. Carbillot, J.-L. Prieur, B. Lopez, Y. Bresson, L. Koechlin, *Astron. Astrophys. Suppl. Ser.* **126**, 555 (1997).
5. “Discovery of a new bright close double star” (*Erratum*), M. Carbillot, B. Lopez, É. Aristidi, Y. Bresson, C. Aime, G. Ricort, J.-L. Prieur, L. Koechlin, G. Helmer, J. Lefèvre, P. Cruzalèbes, *Astron. Astrophys.* **329**, 1172 (1998).
6. “Speckle imaging of binary stars : use of ratios of twofold probability density functions”, M. Carbillot, C. Aime, É. Aristidi, G. Ricort, *Astron. Astrophys. Suppl. Ser.* **127**, 569 (1998).
7. “Speckle observations of double and multiple stars at Pic du Midi : measurements during 1995 and 1997 and new orbits”, É. Aristidi, J.-L. Prieur, M. Scardia, L. Koechlin, R. Avila, M. Carbillot, B. Lopez, Y. Rabbia, P. Nisenson, D. Gezari, *Astron. Astrophys. Suppl. Ser.* **134**, 545 (1999).
8. “High angular resolution observations of late-type stars”, J.-L. Prieur, É. Aristidi, B. Lopez, M. Scardia, F. Mignard, M. Carbillot, *Ap. J. Suppl.* **139**, 249–258 (2002).
9. “Restoration of interferometric images : I. The software package AIRY”, S. Correia, M. Carbillot, P. Boccacci, M. Bertero, L. Fini, *Astron. Astrophys.* **387** (2), 733 (2002).
10. “Restoration of interferometric images : II. The case-study of the Large Binocular Telescope”, M. Carbillot, S. Correia, P. Boccacci, M. Bertero, *Astron. Astrophys.* **387** (2), 743 (2002).
11. “Diamonds in HD 97048 : a closer look” (*Letter*), É. Habart, L. Testi, A. Natta, M. Carbillot, *Ap. J.* **614** (2), L129 (2004).
12. “Restoration of interferometric images : III. Efficient Richardson-Lucy methods for LINC-NIRVANA data reduction”, B. Anconelli, M. Bertero, P. Boccacci, M. Carbillot, H. Lantéri, *Astron. Astrophys.* **430**, 731 (2005).

13. "Restoration of interferometric images : IV. An algorithm for super-resolution of binary systems", B. Anconelli, M. Bertero, P. Boccacci, M. Carillet, *Astron. Astrophys.* **431**, 747 (2005).
14. "Modelling astronomical adaptive optics : I. The software package CAOS", M. Carillet, C. Vérinaud, B. Femenia, A. Riccardi, L. Fini, *Mon. Not. R. Astron. Soc.* **356** (4), 1263 (2005).
15. "Adaptive optics for high-contrast imaging : pyramid sensor versus Shack-Hartmann sensor" (*Letter*), C. Vérinaud, M. Le Louarn, V. Korkiakoski, M. Carillet, *Mon. Not. R. Astron. Soc.* **357** (1), L26 (2005).
16. "Reduction of boundary effects in multiple image deconvolution with an application to LBT LINC-NIRVANA", B. Anconelli, M. Bertero, P. Boccacci, M. Carillet, H. Lantéri, *Astron. Astrophys.* **448** (3), 1217 (2006).
17. "Spatially resolved PAH emission in the inner disks of Herbig Ae/Be stars", É. Habart, A. Natta, L. Testi, M. Carillet, *Astron. Astrophys.* **449** (3), 1067 (2006).
18. "Application of iterative blind deconvolution to the reconstruction of LBT LINC-NIRVANA images", G. Desiderà, B. Anconelli, M. Bertero, P. Boccacci, M. Carillet, *Astron. Astrophys.* **452**, 727 (2006).
19. "Deconvolution of multiple images with high dynamic range and an application to LBT LINC-NIRVANA", B. Anconelli, M. Bertero, P. Boccacci, G. Desiderà, M. Carillet, H. Lantéri, *Astron. Astrophys.* **460**, 349 (2006).
20. "Iterative methods for the reconstruction of astronomical images with high-dynamic range", B. Anconelli, M. Bertero, P. Boccacci, M. Carillet, H. Lantéri, *J. Comp. Appl. Math.* **198**, 321 (2007).
21. "Detection of a moving source in speckle noise : application to exoplanet detection", I. Smith, A. Ferrari, M. Carillet, *IEEE Trans. on Signal Processing* **57** (3), 904 (2009)
22. "Study of the atmospheric refraction in a single mode instrument - Application to AMBER/VLTI", S. Robbe-Dubois, S. Lagarde, Y. Bresson, R. G. Petrov, M. Carillet, E. Lecoarer, F. Rantakyro, I. Tallon-Bosc, M. Vannier, P. Antonelli, G. Martinot-Lagarde, A. Roussel, D. Tasso, *Mon. Not. R. Astron. Soc.* **395** (2), 991 (2009).
23. "Strehl-constrained iterative blind deconvolution for post-adaptive-optics data", G. Desiderà & M. Carillet, *Astron. Astrophys.* **507** (3), 1759 (2009).
24. "Imaging with LINC-NIRVANA (An introduction to deconvolution methods and their capability)", M. Bertero, P. Boccacci, G. Desiderà, A. La Camera, M. Carillet, H. Lantéri, *IEEE Signal Processing Magazine* **27** (1) (*Special Section on Astronomy and Cosmology*), 110 (2010).
25. "Photometric exoplanet characterization using angular and spectral differential imaging", A. Vigan, C. Moutou, M. Langlois, F. Allard, A. Boccaletti, M. Carillet, D. Mouillet, I. Smith, *Mon. Not. R. Astron. Soc.* **407** (1), 71–82 (2010).
26. "Numerical modeling of atmospherically perturbed phase screens : new solutions for classical fast Fourier transform and Zernike methods", M. Carillet & A. Riccardi, *App. Opt.* **49** (31) (*JOSA A/App. Opt. Joint Feature Issue on Adaptive Optics*), G47–G52 (2010).
27. "Low-light-level CCDs for wave-front sensing : what actual gain?", M. Carillet & A. Riccardi, *App. Opt.* **49** (31) (*JOSA A/App. Opt. Joint Feature Issue on Adaptive Optics*), G167–G173 (2010).
28. "Apodized Lyot coronagraph for SPHERE/VLT : I. Detailed numerical study", M. Carillet, Ph. Bendjoya, L. Abe, G. Guerri, A. Boccaletti, J.-B. Daban, K. Dohlen, A. Ferrari, S. Robbe-Dubois, R. Douet, F. Vakili, *Exp. Astronomy* **30** (1), 39–58 (2011).
29. "Apodized Lyot coronagraph for SPHERE/VLT : II. Laboratory tests and performances", G. Guerri, J.-B. Daban, S. Robbe-Dubois, R. Douet, L. Abe, J. Baudrand, P. Riaud, M. Carillet, A. Boccaletti, Ph. Bendjoya, C. Gouvret, F. Vakili, *Exp. Astronomy* **30** (1), 59–81 (2011).
30. "Imaging with LINC-NIRVANA, the Fizeau interferometer of the Large Binocular Telescope : state of the art and open problems", M. Bertero, P. Boccacci, G. Desiderà, A. La Camera, C. Olivieri, M. Carillet, *Inverse Problems* **27**, 113001 (2011).
31. "Deconvolution of post-adaptive optics images of faint circumstellar environments by means of the inexact Bregman procedure", A. Benfenati, A. La Camera, M. Carillet, *Astron. Astrophys.* **586**, A16, <http://dx.doi.org/10.1051/0004-6361/201526960> (2016).

32. "First light of the VLT planet finder SPHERE : IV. Physical and chemical properties of the planets around HR8799", M. Bonnefoy, A. Zurlo, J.L. Baudino, P. Lucas, D. Mesa, A.-L. Maire, A. Vigan, R. Galicher, D. Homeier, F. Marocco, R. Gratton, G. Chauvin, F. Allard, S. Desidera, M. Kasper, C. Moutou, A.-M. Lagrange, A. Baruffolo, J. Baudrand, J.-L. Beuzit, A. Boccaletti, F. Cantalloube, M. Carillet, J. Charton, R.U. Claudi, A. Costille, K. Dohlen, C. Dominik, D. Fantinel, P. Feautrier, M. Feldt, T. Fusco, P. Gigan, J. H. V. Girard, L. Gluck, C. Gry, T. Henning, M. Janson, M. Langlois, F. Madec, Y. Magnard, D. Maurel, D. Mawet, M.R. Meyer, J. Milli, O. Moeller-Nilsson, D. Mouillet, A. Pavlov, D. Perret, P. Puget, S.P. Quanz, S. Rochat, G. Rousset, A. Roux, B. Salasnich, G. Salter, J.-F. Sauvage, H.M. Schmid, A. Sevin, C. Soenke, E. Stadler, M. Turatto, S. Udry, F. Vakili, Z. Wahhaj, F. Wildi, *Astron. Astrophys.* **587**, A58, <http://dx.doi.org/10.1051/0004-6361/201526906> (2016).
33. "VLT/SPHERE deep insight of NGC 3603's core : Segregation or Confusion ?" (*Letter*), Z. Khorrami, T. Lanz, F. Vakili, É. Lagadec, M. Langlois, W. Brandner, O. Chesneau, M. R. Meyer, M. Carillet, L. Abe, D. Mouillet, J.-L. Beuzit, A. Boccaletti, C. Perrot, C. Thalmann, H.-M. Schmid, A. Pavlov, A. Costille, K. Dohlen, D. Le Mignant, C. Petit, J.-F. Sauvage, *Astron. Astrophys.* **588**, L7, <http://dx.doi.org/10.1051/0004-6361/201628107> (2016).
34. "Self-coherent camera as a focal plane phasing sensor", P. Janin-Potiron, P. Martinez, P. Baudoz, M. Carillet, *Astron. Astrophys.* **592**, A110, <http://dx.doi.org/10.1051/0004-6361/201628287> (2016).
35. "Shadow cast on the transition disk of HD 135344B - Multi-wavelength VLT/SPHERE polarimetric differential imaging", T. Stolker, C. Dominik, H. Avenhaus, M. Min, J. de Boer, C. Ginski, H. M. Schmid, A. Juhasz, A. Bazzon, L. B. F. M. Waters, A. Garufi, J.-C. Augereau, M. Benisty, A. Boccaletti, Th. Henning, A.-L. Maire, F. Ménard, M. R. Meyer, M. Langlois, C. Pinte, S. P. Quanz, C. Thalmann, J.-L. Beuzit, M. Carillet, A. Costille, K. Dohlen, M. Feldt, D. Gisler, D. Mouillet, A. Pavlov, D. Perret, C. Petit, J. Pragt, S. Rochat, R. Roelfsema, B. Salasnich, C. Soenke, F. Wildi, *Astron. Astrophys.* **595**, A113, <http://dx.doi.org/10.1051/0004-6361/201528039> (2016).
36. "Fine cophasing of segmented aperture telescopes with ZELDA, a Zernike wavefront sensor in the diffraction-limited regime", P. Janin-Potiron, M. N'Diaye, P. Martinez, A. Vigan, K. Dohlen, M. Carillet, *Astron. Astrophys.* **603**, A23, <https://doi.org/10.1051/0004-6361/201730686> (2017).
37. "Anisoplanatic error evaluation and wide-field adaptive optics performance at Dome C, Antarctica", M. Carillet, É. Aristidi, C. Giordano, J. Vernin, *Mon. Not. R. Astron. Soc.* **471** (3), 3043–3050, <https://doi.org/10.1093/mnras/stx1752> (2017).
38. "Discovery of a warm, dusty giant planet around HIP 65426" (*Letter*), G. Chauvin, S. Desiderà, A.-M. Lagrange, A. Vigan, R. Gratton, M. Langlois, M. Bonnefoy, M. Feldt, M. Meyer, A. Cheetham, B. Biller, A. Boccaletti, V. D'Orazi, R. Galicher, J. Hagelberg, A.-L. Maire, D. Mesa, J. Olofsson, M. Samland, T. Schmidt, E. Sissa, M. Bonavita, B. Charnay, M. Cudel, S. Daemgen, P. Delorme, P. Janin-Potiron, M. Janson, M. Keppler, H. Le Coroller, R. Ligi, G. Marleau, S. Messina, P. Mollière, C. Mordasini, A. Müller, S. Peretti, C. Perrot, L. Rodet, D. Rouan, A. Zurlo, J.-L. Beuzit, D. Mouillet, C. Dominik, T. Henning, F. Menard, H.-M. Schmid, M. Turatto, S. Udry, F. Vakili, L. Abe, J. Antichi, A. Baruffolo, P. Baudoz, J. Baudrand, P. Blanchard, A. Bazzon, M. Carillet, M. Carle, J. Charton, E. Cascone, R. Claudi, A. Costille, A. Deboulbe, V. De Caprio, K. Dohlen, D. Fantinel, P. Feautrier, T. Fusco, P. Gigan, E. Giro, D. Gisler, L. Gluck, N. Hubin, E. Hugot, M. Jaquet, M. Kasper, F. Madec, Y. Magnard, P. Martinez, D. Maurel, D. Le Mignant, O. Möller-Nilsson, M. LLored, T. Moulin, A. Origné, A. Pavlov, D. Perret, C. Petit, J. Pragt, P. Puget, P. Rabou, J. Ramos, R. Rigal, S. Rochat, R. Roelfsema, G. Rousset, A. Roux, B. Salasnich, J.-F. Sauvage, A. Sevin, C. Soenke, E. Stadler, M. Suarez, L. Weber, F. Wildi, J.-C. Augereau, W. Brandner, N. Engler, J. Girard, C. Gry, Q. Kral, T. Kopytova, E. Lagadec, J. Milli, C. Moutou, J. Schlieder, J. Szulágyi, C. Thalmann, Z. Wahhaj, *Astron. Astrophys.* **605**, L9, <https://doi.org/10.1051/0004-6361/201731152> (2017)

39. "Orbiting a binary : SPHERE characterisation of the HD 284149 system", M. Bonavita, V. D'Orazi, D. Mesa, C. Fontanive, S. Desidera, S. Messina, S. Daemgen, R. Gratton, A. Vigan, M. Bonnefoy, A. Zurlo, J. Antichi, H. Avenhaus, A. Baruffolo, J.-L. Baudino, J.-L. Beuzit, A. Boccaletti, P. Bruno, T. Buey, M. Carillet, E. Cascone, G. Chauvin, R. U. Claudi, V. De Caprio, D. Fantinel, G. Farisato, M. Feldt, R. Galicher, E. Giro, C. Gry, J. Hagelberg, S. Incorvaia, M. Janson, M. Jaquet, A.-M. Lagrange, M. Langlois, J. Lannier, H. Le Coroller, L. Lessio, R. Ligi, A.-L. Maire, F. Menard, C. Perrot, S. Peretti, C. Petit, J. Ramos, A. Roux, B. Salasnich, G. Salter, M. Samland, S. Scuderi, J. Schlieder, M. Surez, M. Turatto, L. Weber, *Astron. Astrophys.* **608**, A106, <https://doi.org/10.1051/0004-6361/201731003> (2017)
40. "Analytical decomposition of Zernike modes over an hexagonal segmented pupil", P. Janin-Potiron, P. Martinez, M. Carillet, submitted to *App. Opt.* (October 2017)
41. "Orbital and spectral analysis of the benchmark brown dwarf HD 4747B", S. Peretti, D. Ségransan, B. Lavie, S. Desiderà, A.-L. Maire, V. D'Orazi, A. Vigan, J.-L. Baudino, A. Cheetham, M. Janson, G. Chauvin, J. Hagelberg, F. Ménard, K. Heng, S. Udry, A. Boccaletti, M. Bonnefoy, M. Carillet, M. Carle, S. Daemgen, V. De Caprio, M. Feldt, L. Gluck, R. Gratton, E. Hugot, A.-M. Lagrange, M. Langlois, H. Le Coroller, Y. Magnard, D. Mesa, M. Meyer, T. Moulin, A. Pavlov, J. Pragt, P. Rabou, J. Ramos, D. Rouan, G. Rousset, M. Samland, T. Schmidt, A. Sevin, C. Soenke, E. Stadler, L. Weber, F. Wildi, A. Zurlo, submitted to *Astron. Astrophys.* (December 2017),

#### — Autres revues

(3 articles)

42. "Preliminary results of simulations for the adaptive optics system of the Large Binocular Telescope", M. Carillet, A. Riccardi, B. Femenía, L. Fini, S. Esposito, *AstroTech Journal, Mem. Soc. Astr. It.* **2** (2), 66–76 (1999).
43. "SPHERE : a planet finder instrument for the VLT", J.-L. Beuzit, M. Feldt, K. Dohlen, D. Mouillet, P. Puget, J. Antichi, A. Baruffolo, P. Baudoz, A. Berton, A. Boccaletti, M. Carillet, J. Charton, R. Claudi, M. Downing, P. Feautrier, E. Fedrigo, T. Fusco, R. Gratton, N. Hubin, M. Kasper, M. Langlois, C. Moutou, L. M. Mugnier, J. Pragt, P. Rabou, M. Saisse, H.-M. Schmid, E. Stadler, M. Turatto, S. Udry, R. Waters, F. Wildi, *ESO Messenger* **125**, 29 (2006).
44. "The SPEED project : SPEEDing up research and development towards high-contrast imaging instruments for the E-ELT", P. Martinez, O. Preis, C. Gouvret, J. Dejongue, J.-B. Daban, A. Spang, F. Martinache, M. Beaulieu, P. Janin-Potiron, L. Abe, Y. Fantéï-Caujolle, S. Ottogalli, D. Mattei, M. Carillet, *ESO Messenger* **159**, 19 (2015).

#### — Communications à des conférences / Invité

(3 articles, 2 talk, 4 résumés)

45. "Restoration of interferometric images from the Large Binocular Telescope", M. Carillet, S. Correia, M. Bertero, P. Boccacci, *abstract* paru dans les actes du Symposium "Imaging problems for the new generation telescopes", *VI Congresso della Società Italiana di Matematica Applicata e Industriale* (SIMAI 2002), Chia-Laguna, Sardaigne, Italie (2002).
46. "Adaptive optics for ground-based large telescopes", C. Vérinaud, E. Diolaiti, M. Carillet, C. Arcidiacono, R. Ragazzoni, *abstract* paru dans les actes du Symposium "Imaging problems for the new generation telescopes", *VI Congresso della Società Italiana di Matematica Applicata e Industriale* (SIMAI 2002), Chia-Laguna, Sardaigne, Italie (2002).
47. "CAOS (Code for Adaptive Optics Systems) : a problem-solving environment in high-angular-resolution astronomy", M. Carillet, *abstract* paru dans les actes de la Session "Scientific Computing Environment for Imaging in Science", *2004 International Conference on Computational Science and its Applications* (ICCSA 2004), Santa Maria degli Angeli, Assisi, Italie (2004).
48. "Numerical simulations in astronomical adaptive optics – the CAOS system", M. Carillet, *abstract* paru dans les actes de *OCS 2005 - Optical Complex Systems*, Marseille, France (2005).

49. "Astronomical adaptive optics for high contrast imaging", M. Carillet, in "Astronomy with High Contrast Imaging III : instrumentation and data processing", M. Carillet, C. Aime, A. Ferrari, Eds., *EAS Publications Series* **22**, 121–138 (2006).
50. "(Introduction to) The CAOS Problem-Solving Environment & The Software Package CAOS  $\oplus$  Adaptive Optics Simulations...", L. Catala & M. Carillet, Cours et exercices sur machine présentés à l'école d'été "Atmospheric Characterization and Adaptive Optics in Astronomy" (Sutherland, Afrique du Sud, décembre 2012), <http://amao.sao.ac.za/events/> (2012).
51. "Astronomical imaging... Atmospheric turbulence ? Adaptive optics !", M. Carillet, in "New Concepts in Imaging : Optical and Statistical Models", D. Mary, C. Theys, and C. Aime, Eds., *EAS Publications Series* **59**, 59–76 (2013).
52. "Adaptive optics feedback control", J.-P. Folcher, M. Carillet, A. Ferrari, A. Abelli, in "New Concepts in Imaging : Optical and Statistical Models", D. Mary, C. Theys, and C. Aime, Eds., *EAS Publications Series* **59**, 93–130 (2013).
53. "Reconstruction of Fizeau images of Io volcanoes obtained with the LBTI/LMIRcam", A. La Camera, M. Bertero, P. Boccacci, M. Carillet, L. Shreiber, A. Conrad, *talk* paru dans les actes de *AO data processing workshop 2015*, <http://www.lam.fr/recherche-14/r-d-optics-instrumentation/workshops/article/ao-data-processing-workshop> (2015).

— Communications à des conférences / Autres articles publiés  
(100 articles dont 50 SPIE et 10 AO4ELT)

54. "Probability imaging of binary stars from infrared speckle observations", M. Carillet, É. Aristidi, G. Ricort, C. Aime, in "International Conference on Holography and Correlation Optics", O. V. Angelsky Ed., *SPIE Proc.* **2647**, 422–432 (1995).
55. "Speckle observations of late-type post-Hipparcos double stars", É. Aristidi, B. Lopez, M. Carillet, P. Cruzalèbes, F. Mignard, Y. Bresson, G. Helmer, in "Science with the VLT interferometer", F. Paresce Ed., *ESO Astrophysics Symposia*, 351–352 (1997).
56. "High-resolution measurements of close binary stars and the probability imaging technique", M. Carillet, C. Aime, É. Aristidi, G. Ricort, in "Science with the VLT interferometer", F. Paresce Ed., *ESO Astrophysics Symposia*, 361–362 (1997).
57. "Laser guide stars for 8-m class telescopes", F. Delplancke, M. Carillet, N. Hubin, S. Esposito, F. Rigaut, E. Marchetti, A. Riccardi, É. Viard, R. Ragazzoni, M. Le Louarn, L. Fini, in "Adaptive Optical System Technologies", D. Bonaccini & R. K. Tyson Eds., *SPIE Proc.* **3353**, 371–382 (1998).
58. "From adaptive secondary mirrors to extra-thin extra-large adaptive primary mirrors", G. Brusa, A. Riccardi, M. Accardo, V. Biliotti, M. Carillet, C. Del Vecchio, S. Esposito, B. Femenía, O. Feeney, L. Fini, S. Gennari, L. Miglietta, P. Salinari, P. Stefanini, in "Proceedings of the Backaskög workshop on extremely large telescopes", T. Andersen, A. Ardeberg & R. Gilmozzi, Eds., *ESO Conference & Workshop Proc.* **57**, 181–201 (1999).
59. "LA<sup>3</sup>OS<sup>2</sup> : a software package for laser guide star adaptive optics systems", M. Carillet, B. Femenía, F. Delplancke, S. Esposito, L. Fini, A. Riccardi, É. Viard, N. Hubin, F. Rigaut, in "Adaptive Optics Systems and Technology", R. K. Tyson & R. Q. Fugate Eds., *SPIE Proc.* **3762**, 378–389 (1999).
60. "Large Binocular Telescope image restoration using simulated adaptively corrected point-spread functions", S. Correia, M. Carillet, A. Richichi, M. Bertero, P. Boccacci, in "Interferometry in Optical Astronomy", P. J. Léna & A. Quirrenbach Eds., *SPIE Proc.* **4006**, 650–658 (2000).
61. "Considerations about the differential piston for adaptive optics interferometry", B. Femenía, M. Carillet, S. Esposito, A. Riccardi, in "Interferometry in Optical Astronomy", P. J. Léna & A. Quirrenbach Eds., *SPIE Proc.* **4006**, 1116–1127 (2000).
62. "Adaptive optics simulations for imaging with the Large Binocular Telescope interferometer : a first application", M. Carillet, S. Correia, B. Femenía, A. Riccardi, in "Adaptive Optical Systems Technology", P. L. Wizinowich Ed., *SPIE Proc.* **4007**, 155–166 (2000).

63. “A study for a multi-conjugate adaptive optics system for 8-m class telescopes”, G. Brusa, A. Riccardi, S. Esposito, B. Femenía, M. Carbillot, in “Adaptive Optics Technology”, T. D. Steiner, P. H. Merritt, Eds., *SPIE Proc. 4034*, 190–200 (2000).
64. “Atmospheric OPD implications for adaptive IR and optical interferometry”, B. Femenía, M. Carbillot, S. Esposito, A. Riccardi, in “School on space and ground based optical/infrared interferometry”, *Proc. of the NOVA/LEIDEN/NEVEC/ESO/ESA workshop*, 295–301 (2000).
65. “CAOS Simulation Package 3.0 – an IDL-based tool for adaptive optics systems design and simulations”, M. Carbillot, L. Fini, B. Femenía, A. Riccardi, S. Esposito, É. Viard, F. Delplancke, N. Hubin, in “Astronomical Data Analysis Software And Systems X”, F. R. Harnden, Jr., F. A. Primini, H. E. Payne, Eds., *ASP Conf. Series 238*, 249–252 (2001).
66. “The CAOS Application Builder”, L. Fini, M. Carbillot, A. Riccardi, in “Astronomical Data Analysis Software And Systems X”, F. R. Harnden, Jr., F. A. Primini, and H. E. Payne, Eds., *ASP Conf. Series 238*, 253–256 (2001).
67. “AIRY — Astronomical Image Restoration in interferometrY”, S. Correia, M. Carbillot, L. Fini, P. Boccacci, M. Bertero, A. Vallenari, A. Richichi, M. Barbat, in “Astronomical Data Analysis Software And Systems X”, F. R. Harnden, Jr., F. A. Primini, and H. E. Payne Eds., *ASP Conf. Series 238*, 404–407 (2001).
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**— Communications à des conférences / Autres résumés, *posters* et *talks* publiés**

(6 résumés, 9 posters, 4 talks)

154. "Techniques probabilistes appliquées à l'imagerie de binaires en infrarouge", M. Carbillot, *abstract* paru dans les actes "14èmes journées scientifiques de la SFSA", Besançon, France (1994).
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### — Communications à des conférences / Présentations non publiées (7 posters)

173. “Lidar and imaging through turbulence”, M. Carbillot, *poster* présenté à l’OTAN Summer School “*Laser Guide Stars for Adaptive Optics*”, Carghjese, Corsica (1997).
174. “CAOS (Code for Adaptive Optics Systems) Software Package : New Developments”, C. Vérinaud, M. Carbillot, B. Femenía, *poster* présenté à la conférence “SF2A 2002 - Semaine de l’Astrophysique Française”, Paris, France (2002).

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## — Rapports & Thèses

(1 thèse de doctorat, 1 thèse d'habilitation, 3 rapports de stage ou postdoc, 11 rapports de projet)

180. "Détermination des paramètres orbitaux d'étoiles doubles en infra-rouge", M. Carbillot, *rapport de DEA — Université de Nice-Sophia Antipolis* (1993).
181. "Probability imaging of double/multiple stars : extension to the two-dimensional problem", M. Carbillot, *rapport final de stage du réseau Européen HCM* (1995).
182. "Techniques probabilistes : application à l'imagerie à haute résolution angulaire en astrophysique", M. Carbillot, *Thèse de doctorat — Université de Nice-Sophia Antipolis* (1996).
183. "Mesures LIDAR et turbulence atmosphérique : étude sur la distribution d'intensité LIDAR", M. Carbillot, *rapport post-doctoral final COTRAO* (1997).
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