

Laurent Jolissaint's Publications List  
2001-2008

- [33] *Adaptive optics sky coverage for Dome C telescopes*  
J.S. Lawrence, M.C.B. Ashley, J.W.V. Storey, **L. Jolissaint**, T. Travouillon  
**PASP** 120, pp. 1119–1127, 2008
- [32] *Exploring the Impact of PSF Reconstruction Errors on the Reduction of Astronomical Adaptive Optics based Data*  
**Laurent Jolissaint**, Hervé Carfantan, Eric Anterrieu  
**SPIE Proceedings** 7015, 2008
- [31] *Midinfrared adaptive optics in the ELT era*  
Sarah Kendrew, **Laurent Jolissaint**, Remko Stuik, Richard J. Mathar, Stefan Hippler, Bernhard R. Brandl  
**SPIE Proceedings** 7015, 2008
- [30] *METIS - the Mid-infrared E-ELT Imager and Spectrograph*  
Brandl, Bernhard R.; Lenzen, Rainer; Pantin, Eric; Glasse, Alistair; Blommaert, Joris; Venema, Lars; Molster, Frank; Siebenmorgen, Ralf; Boehnhardt, Hermann; van Dishoeck, Ewine; van der Werf, Paul; Henning, Thomas; Brandner, Wolfgang; Lagage, Pierre-Olivier; Moore, Toby J. T.; Baes, Maarten; Waelkens, Christoffel; Wright, Chris; Kaeuff, Hans Ulrich; Kendrew, Sarah; Stuik, Remko;  
**Jolissaint, Laurent**  
**SPIE Proceedings** 7015, 2008
- [29] *ASSIST: the test setup for the VLT AO facility*  
Remko Stuik, Robin Arsenault, Atul Deep, Bernard Delabre, Pascal Hallibert, **Laurent Jolissaint**, Norbert Hubin, Sarah Kendrew, Pierre-Yves Madec, Jerome Paufigue, Evert Pauwels, Stefan Stroebele, Emiel Wiegiers  
**SPIE Proceedings** 7015, 2008
- [28] *AO PSF reconstruction: a review of the quests (Invited Paper)*  
David Le Mignant, Ralf C. Flicker, Matthew C. Britton, Jean-Pierre Véran, Michael P. Fitzgerald, Donald T. Gavel, **Laurent Jolissaint**, Marcos A. van Dam, Erik M. Johansson  
**SPIE Proceedings** 7015, 2008
- [27] *Speckle Noise and Dynamic Range in Coronagraphic Images*  
Soummer, R., Ferrari, A., Aime, C. and **Jolissaint, L.**  
**ApJ**, 669, pp. 642–656, 2007
- [26] *ASSIST: development of a test-infrastructure for the VLT AO facility*  
Stuik, R., Arsenault, R., Deep, A., Delabre, B., Hallibert, P., **Jolissaint, L.**, Hubin, N., Kendrew, S., Madec, P.-Y., Paufigue, J. and Stroebele, S.  
**SPIE Proceedings**, 6691, 2007
- [25] *Performance Modeling of a Wide Field Ground Layer Adaptive Optics System*  
Andersen, D., Stoesz, J., Morris, S., Lloyd-Hart, M., Crampton, D., Butterley, T., Ellerbroek, B., **Jolissaint, L.**, Milton, N. M., Myers, R., Szeto, K., Tokovinin, A., Veran, J. -, Wilson, R.  
**PASP**, 118, pp. 1574–1590, 2006

- [24] *The MOAO system of the IRMOS near-infrared multi-object spectrograph for TMT* Andersen, D. R., Eikenberry, S. S., Fletcher, M., Gardhouse, W., Leckie, B., Véran, J.-P., Gavel, D., Clare, R., Guzman, R., **Jolissaint, L.**, Julian, R. and Rambold, W. **SPIE Proceedings**, 6269, 2006
- [23] *Optical Turbulence Generators for Testing Astronomical Adaptive Optics Systems: A Review and Designer Guide*  
**L. Jolissaint**  
**PASP**, 118, pp. 1205–1224, 2006
- [22] *Hot-air optical turbulence generator for the testing of adaptive optics systems: principles and characterization*  
O. Keskin, **L. Jolissaint** and C. Bradley  
**Applied Optics**, 45, pp. 4888–4897, 2006
- [21] *Analytical modeling of the optical transfer function of a segmented telescope with/without adaptive optics correction of the telescope’s dynamical aberrations*  
**L. Jolissaint**, B. Ellerbroek and G. Angeli  
**SPIE Proceedings**, 6271, 2006
- [20] *Speckle statistics in direct and coronagraphic imaging*  
R. Soummer, C. Aime, A. Ferrari, A. Sivaramakrishnan, **L. Jolissaint**, J. Lloyd, B. Oppenheimer, R. Makidon, M. Carillet  
in *IAU Colloq. 200: Direct Imaging of Exoplanets: Science & Techniques*, C. Aime and F. Vakili, editors, pp. 581–586, 2006
- [19] *Analytical Modelling of Adaptive Optics: Foundations of the Phase Spatial Power Spectrum Approach*  
**L. Jolissaint**, J.-P. Véran and R. Conan  
**JOSA A**, 23, pp. 382–394, 2006
- [18] *Spatial Frequency Analytical Modelling of Adaptive Optics for Diffraction Limited Coronagraphs Studies on Extremely Large Segmented Telescopes*  
**L. Jolissaint**  
in *EAS Publications Series, Vol. XIII*, C. Aime and M. Carillet, eds., EDP Sciences, Les Ulis, 2005
- [17] *Multiple-layer Optical Turbulence Generator Principle and SLODAR Characterization: Preliminary Results*  
**L. Jolissaint**, O. Keskin, C. Bradley, B. Wallace and A. Hilton  
**SPIE Proceedings** 5572, pp. 256–261, 2004
- [16] *An Analytic Model for the Study of the Impact of Mirror Segmentation on AO Performance, and Application to a 30 m Segmented Telescope*  
**L. Jolissaint** and J.-F. Lavigne  
**SPIE Proceedings** 5497, pp. 349–360, 2004
- [15] *Predicting the Aerodynamic Performance of the Canadian Very Large Optical Telescope*  
J. Fitzsimmons, J. Dunn, G. Herriot, **L. Jolissaint**, S. Roberts, M. Mamou and K. Cooper  
**SPIE Proceedings** 5497, pp. 321–328, 2004
- [14] *OPERA, an Automatic PSF Reconstruction Software for Shack-Hartmann AO Systems:*

*Application to Altair*

**L. Jolissaint**, J.-P. Véran and J. Marino  
*SPIE Proceedings* 5490, pp. 151–163, 2004

[13] *Ground Layer Adaptive Optics Performance in Antarctica*

T. Travouillon, J. S. Lawrence and **L. Jolissaint**  
**SPIE Proceedings** 5490, pp. 934–942, 2004

[12] *An Analytical Model for Natural Guide Star Wide Field Adaptive Optics*

J. A. Stoesz, **L. Jolissaint**, J.-P. Véran and J. LeDuc  
**SPIE Proceedings** 5490, pp. 713–720, 2004

[11] *Evaluation of the On-sky Performance of Altair*

J. A. Stoesz, J.-P. Véran, F. Rigaut, G. Herriot, **L. Jolissaint** and D. Frenette,  
**SPIE Proceedings** 5490, pp. 67–78, 2004

[10] *Wide Field Adaptive Optics Upper Limit Performances*

**L. Jolissaint**, J.-P. Véran and J.A. Stoesz  
**SPIE Proceedings** 5382, 2004

[9] *Aerodynamic Modelling of the Canadian Very Large Optical Telescope*

J. Fitzsimmons, G. Herriot, **L. Jolissaint**, S. Roberts, K. Cooper and M. Mamou  
**SPIE Proceedings** 5382, 2004

[8] *Adaptive Optics and Site Requirements for the Search of Earth-like Planets with ELTs*

O. Lardiere, P. Salinari, **L. Jolissaint**, M. Carbillet, A. Riccardi and S. Esposito  
**SPIE Proceedings** 5382, 2004

[7] *Dual Conjugate Adaptive Optics Testbed: Progress Report*

B. Wallace, C. Bradley, H. Richardson, J. Kennedy, O. Keskin, P. Hampton, D. Robertson, **L. Jolissaint** and A. Hilton  
**SPIE Proceedings** 5169, pp. 255–261, 2003

[6] *Hot-air Turbulence Generator for Multiconjugate Adaptive Optics, Invited Paper*

O. Keskin, **L. Jolissaint**, C. Bradley, S. Dost and I. Sharf  
**SPIE Proceedings** 5162, pp. 49–57, 2003

[5] *VLOT Project Book. A Large Optical Telescope for the 21th Century*

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Herzberg Institute of Astrophysics, National Research Council of Canada, Victoria, BC, Canada,  
2003

[4] *Fast Computation and Morphologic Interpretation of the Adaptive Optics Point Spread Function*

**L. Jolissaint** and J.-P. Véran

in *Beyond conventional adaptive optics*, E. Vernet, R. Ragazzoni, S. Esposito, and N. Hubin, eds.,  
*ESO Conference and Workshop Proceedings* 58, p. 201, 2002

[3] *Design of the Dual Conjugate Adaptive Optics Test-bed*

I. Sharf, K. Bell, D. Crampton, J. Fitzsimmons, G. Herriot, **L. Jolissaint**, B. Lee, H. Richardson, D.  
van der Kamp, J.-P. Véran.

in *Beyond conventional adaptive optics : a conference devoted to the development of adaptive optics for extremely large telescopes*, E. Vernet, R. Ragazzoni, S. Esposito and N. Hubin, ed., *ESO Conference and Workshop Proceedings* **58**, 2002

[2] *The Science Case and Instrumentation for Extra Large Telescopes, Report for the Extra Large Telescope Canadian project*

E.B. Gillespie, R. Carlberg, T. Davidge, JJ Kavelaars, D. Crabtree, M. Hudson, J.B. Oke, C.L. Morbey, R.G. Abraham, **L. Jolissaint**, J.-P. Véran, J.P. Fulbright, P.B. Stetson, D. Bohlender tech. rep., Herzberg Institute of Astrophysics, National Research Council of Canada, April 2001.

[1] *Optique adaptative au foyer d'un télescope de la classe 1 mètre*

**L. Jolissaint**

Thèse de doctorat de la Faculté des sciences de l'Université de Genève, mention interdisciplinaire. Genève, 2001