

Bibliographie du: October 20, 2014

Thèse

- [1] Merlet J-P. *Contribution à la commande par retour d'efforts. Application au contrôle des robots parallèles*. Thèse, Université Paris VI, Paris, 18 Juin 1986
- [2] Merlet J-P. Les robots parallèles, 21 Juin 1993 Habilitation à diriger les recherches, UNSA, Nice.

Livres (7)

- [1] Boissonnat J-D, Faverjon B., et Merlet J-P. *Techniques de la robotique: Perception et Planification*. Hermès, Paris, 1988.
- [2] Boissonnat J-D, Faverjon B., et Merlet J-P. *Techniques de la robotique: Architectures et Commande*. Hermès, Paris, 1988.
- [3] Merlet J-P. *Les Robots parallèles*. Hermès, Paris, 1990.
- [4] Merlet J-P. et Ravani B. *Computational Kinematics'95*. Kluwer Academic Publishers, Dordrecht, 1995.
- [5] Merlet J-P. *Les Robots parallèles*. Hermès, Paris, 1997.
- [6] Merlet J-P. *Parallel robots*. Kluwer, Dordrecht, 2000.
- [7] Merlet J-P. *Parallel robots, 2nd Edition*. Springer, Heidelberg, 2005.

Chapitre de Livres (5)

- [1] Merlet J-P. et Daney D. *Appropriate Design of Parallel Manipulators*, Chapitre 1, pages 1–25. Springer, 2008.
- [2] Merlet J-P. et Gosselin C. *Handbook of Robotics*, Chapitre Parallel Mechanisms and Robots, pages 269–285. Springer, Heidelberg, 2008.
- [3] Pierrot F. et Merlet J-P. *Analysis and modeling of robots manipulators*, Chapitre Parallel robots. Hermès, Paris, 2006. (traduction anglaise mise à jour de la version française).
- [4] Pierrot F. et Merlet J-P. *Analyse et modélisation des robots manipulateurs*, Chapitre Modélisation des robot parallèles, pages 93–144. Hermès, Paris, 2001. sous la direction d'E. Dombre.
- [5] Tzafestas S., Editeur. *Force-feedback control in robotics tasks*, pages 283–312. Marcel Dekker Inc., New-York, 1991.

Journaux (42)

- [ART1] Wang T., Merlet J-P., Sacco G., Robert P., Turpin J-M., Teboul B., Marteu A., et Guerin O. Walking analysis of young-elderly people by using an intelligent walker ANG. *Robotics and Autonomous Systems*, http://www-sop.inria.fr/coprin/PDF/robot_auto130114_wang.pdf, 2014.
- [ART2] Carricato M. et Merlet J-P. Stability analysis of underconstrained cable-driven parallel robots. *IEEE Trans. on Robotics*, 29(1):288–296, http://www-sop.inria.fr/coprin/PDF/tro_carricato_2013.pdf, 2013.
- [ART3] Bennour S., Zarrouk N., Dogui M., Romdhane L., et Merlet J-P. Validation of optimisation model that estimates the musculotendinous forces during an isometric extension of knee. *Computer Methods in Biomechanics and Biomedical Engineering*, 16(1):167–169, http://www-sop.inria.fr/coprin/PDF/merlet_bennour_cmbbe_2013.pdf, 2013.
- [ART4] Bennour S., Zarrouk N., Dogui M., Romdhane L., et Merlet J-P. Biomechanical model of the ankle to estimate the musculotendinous forces during an isometric plantar flexion. *Computer Methods in Biomechanics and Biomedical Engineering*, 15(1):167–170, http://www-sop.inria.fr/coprin/PDF/merlet_bennour_cmbbe_2012.pdf, 2012.
- [ART5] Gouttefarde M., Daney D., et Merlet J-P. Interval-analysis based determination of the wrench-feasible workspace of parallel cable-driven robots. *IEEE Trans. on Robotics*, 27(1):1–13, <http://hal.inria.fr/lirmm-00573491/en>, Février 2011
- [ART6] Bennour S., Harshe M., Romdhane L., et Merlet J-P. A new experimental setup based on a parallel cable robot for analysis and control of human motion. *Computer Methods in Biomechanics and Biomedical Engineering*, 14(Supplement 1):83–85, http://www-sop.inria.fr/coprin/PDF/bennour_merlet_cmbbe_2011.pdf, Août 2011
- [ART7] Oetomo D., Daney D., Shirinzadeh B., et Merlet J-P. An interval-based method for workspace analysis of planar flexure-jointed mechanism. *ASME J. of Mechanical Design*, 131(1), <http://www-sop.inria.fr/coprin/PDF/jmd2009.pdf>, Janvier 2009
- [ART8] Oetomo D., Daney D., et Merlet J-P. Design strategy of serial manipulators with certified constraint satisfaction. *IEEE Trans. on Robotics*, 25(1):1–11, http://www-sop.inria.fr/coprin/PDF/oetomo_merlet_tro_2009.pdf, Février 2009
- [ART9] Merlet J-P. Interval analysis and reliability in robotics. *Int. J. Reliability and Safety*, 3(1/2/3):104–130, http://www-sop.inria.fr/coprin/PDF/merlet_ijrs2009.pdf, 2009.

- [ART10] Merlet J-P. Interval analysis for certified numerical solution of problems in robotics. *Int. J. of Applied Mathematics and Computer Science*, 19(3):399–412, Septembre 2009
- [ART11] Hubert J. et Merlet J-P. Static of parallel manipulators and closeness to singularity. *J. of Mechanisms and Robotics*, 1(1), http://www-sop.inria.fr/coprin/PDF/hubert_merlet_jmr_2009.pdf, Février 2009
- [ART12] Harada K. et al. A reconfigurable modular robotic endoluminal surgical system: vision and preliminary results. *Robotica*, 28(1):171–183, <http://www-sop.inria.fr/coprin/PDF/robotica2010.pdf>, 2009.
- [ART13] Merlet J-P. A formal-numerical approach for robust in-workspace singularity detection. *IEEE Trans. on Robotics*, 23(3):393–402, http://www-sop.inria.fr/coprin/PDF/merlet_trans_ieee2007.pdf, Juin 2007
- [ART14] Merlet J-P. Robust design of a deployable space telescope. *ECMI Newsletter*, 39:9–11, Mars 2006
- [ART15] Merlet J-P. Jacobian, manipulability, condition number, and accuracy of parallel robots. *ASME J. of Mechanical Design*, 128(1):199–206, http://www-sop.inria.fr/coprin/PDF/merlet_jmd2006.pdf, Janvier 2006
- [ART16] Pavicic M., Merlet J-P., McKay B., et Megill N.D. Kochen-specker vectors. *J. Phys. A: Math Gen.*, 38(7):1577–1592, http://www-sop.inria.fr/coprin/PDF/kochen_merlet2004.pdf, Février 2005
- [ART17] Papegay Y., Merlet J-P., et Daney D. Exact kinematics analysis of car’s suspension mechanisms using symbolic computation and interval analysis. *Mechanism and Machine Theory*, 40(4):395–413, Avril 2005
- [ART18] Fang H. et Merlet J-P. Multi-criteria optimal design of parallel manipulators based on interval analysis. *Mechanism and Machine Theory*, 40(2):151–171, http://www-sop.inria.fr/coprin/PDF/fang_merlet_mmt_2005.pdf, Février 2005
- [ART19] Merlet J-P. Solving the forward kinematics of a Gough-type parallel manipulator with interval analysis. *Int. J. of Robotics Research*, 23(3):221–236, http://www-sop.inria.fr/coprin/PDF/ijrr_merlet2004.pdf, 2004.
- [ART20] Lee E., Mavroidis C., et Merlet J-P. Five precision points synthesis of spatial RRR manipulators using interval analysis. *ASME J. of Mechanical Design*, 126(5):842–849, Septembre 2004
- [ART21] Lebbah Y., Michel C., Rueher M., Merlet J-P., et Daney D. Combining local consistencies with a new global filtering algorithm on linear relaxations. *SIAM J. of Numerical Analysis*, 2004.

- [ART22] Chablat D., Wenger P., Majou F., et Merlet J-P. An interval analysis based study for the design and the comparison of three-degrees-of-freedom parallel kinematic machine. *Int. J. of Robotics Research*, 23(6):615–624, http://www-sop.inria.fr/coprin/PDF/chablat_merlet_ijrr_2004.pdf, 2004.
- [ART23] Merlet J-P. A parser for the interval evaluation of analytical functions and its applications to engineering problems. *J. Symbolic Computation*, 31(4):475–486, 2001.
- [ART24] Merlet J-P. A generic trajectory verifier for the motion planning of parallel robots. *ASME J. of Mechanical Design*, 123(4):510–515, http://www-sop.inria.fr/coprin/PDF/merlet_asme2001.pdf, Décembre 2001
- [ART25] Merlet J-P. Determination of 6D workspaces of Gough-type parallel manipulator and comparison between different geometries. *Int. J. of Robotics Research*, 18(9):902–916, http://www-sop.inria.fr/coprin/PDF/merlet_ijrr99.pdf, Octobre 1999
- [ART26] Merlet J-P., Gosselin C., et Mouly N. Workspaces of planar parallel manipulators. *Mechanism and Machine Theory*, 33(1/2):7–20, http://www-sop.inria.fr/coprin/PDF/merlet_mmt98.pdf, Janvier 1998
- [ART27] Ponce J., Sudsang A., Sullivan S., Faverjon B., Boissonnat J-D., et Merlet J-P. On computing four-finger equilibrium and force-closure grasps of polyhedral objects. *Int. J. of Robotics Research*, 16(1):11–35, Février 1997
- [ART28] Merlet J-P. Designing a parallel manipulator for a specific workspace. *Int. J. of Robotics Research*, 16(4):545–556, <http://www-sop.inria.fr/coprin/PDF/ijrr97.pdf>, Août 1997
- [ART29] Merlet J-P. Democrat: A DEsign Methodology for the Conception of robots with parallel ArchiTecture. *Robotica*, 15(4):367–373, http://www-sop.inria.fr/coprin/PDF/merlet_robotica97.pdf, Juillet- Août, 1997
- [ART30] Merlet J-P. Redundant parallel manipulators. *J. of Laboratory Robotic and Automation*, 8(1):17–24, http://www-sop.inria.fr/coprin/PDF/merlet_ijlra96.pdf, 1996.
- [ART31] Merlet J-P. Determination of the orientation workspace of parallel manipulators. *J. of Intelligent and Robotic Systems*, 13(1):143–160, http://www-sop.inria.fr/coprin/PDF/merlet_jirs95.pdf, 4-6 Septembre 1995
- [ART32] Merlet J-P. Détermination de l’espace de travail d’un robot parallèle pour une orientation constante. *Mechanism and Machine Theory*, 29(8):1099–1113, <http://www-sop.inria.fr/coprin/PDF/mmt94.pdf>, Novembre 1994

- [ART33] Merlet J-P. Trajectory verification in the workspace for parallel manipulators. *Int. J. of Robotics Research*, 13(4):326–333, http://www-sop.inria.fr/coprin/PDF/merlet_ijrr94.pdf, Août 1994
- [ART34] Merlet J-P. Parallel manipulators: state of the art and perspective. *Advanced Robotics*, 8(6):589–596, Décembre 1994
- [ART35] Gosselin C. et Merlet J-P. On the direct kinematics of planar parallel manipulators: special architectures and number of solutions. *Mechanism and Machine Theory*, 29(8):1083–1097, http://www-sop.inria.fr/coprin/PDF/gosselin_merlet_mmt94.pdf, Novembre 1994
- [ART36] Merlet J-P. Direct kinematics of parallel manipulators. *IEEE Trans. on Robotics and Automation*, 9(6):842–845, Décembre 1993
- [ART37] Merlet J-P. Forward kinematics of non-polyhedral parallel manipulators. *ASME J. of Mechanical Design*, 115(4):938–940, http://www-sop.inria.fr/coprin/PDF/merlet_asme93.pdf, Décembre 1993
- [ART38] Merlet J-P. Geometry and Kinematic singularities of closed-loop manipulators. *J. of Laboratory Robotic and Automation*, 4(1):85–96, http://www-sop.inria.fr/coprin/PDF/merlet_ijklra92.pdf, 1992.
- [ART39] Merlet J-P. Parallel manipulators: state of the art and perspective. *Journal of Robotics Society of Japan*, 10(6):57–62, http://www-sop.inria.fr/coprin/PDF/merlet_rsj92.pdf, Octobre 1992
- [ART40] Merlet J-P. Direct kinematics and assembly modes of parallel manipulators. *Int. J. of Robotics Research*, 11(2):150–162, http://www-sop.inria.fr/coprin/PDF/merlet_ijrr92.pdf, Avril 1992
- [ART41] Merlet J-P. et Gosselin C. Nouvelle architecture pour un manipulateur parallèle à 6 degrés de liberté. *Mechanism and Machine Theory*, 26(1):77–90, http://www-sop.inria.fr/coprin/PDF/merlet_mmt91.pdf, 1991.
- [ART42] Merlet J-P. Singular configurations of parallel manipulators and Grassmann geometry. *Int. J. of Robotics Research*, 8(5):45–56, http://www-sop.inria.fr/coprin/PDF/merlet_ijrr89.pdf, Octobre 1989

Summary:

Advanced Robotics (1), ASME J. of Mechanical Design (5), Computer Methods in Biomechanics and Biomedical Engineering (3), ECMI Newsletter (1), IEEE Trans. on Robotics (5), IEEE Trans. on Robotics and Automation (1), Int. J. of Applied Mathematics and Computer Science (1), Int. J. of Robotics Research (8), Int. J. Reliability and Safety (1), J. of Intelligent and Robotic Systems (1), J. of Laboratory Robotic and Automation (2), J. of Mechanisms and Robotics (1), Journal of Robotics Society of Japan (1), J. Phys. A: Math Gen. (1), J. Symbolic Computation (1), Mechanism and Machine Theory (6), Robotica (2), Robotics and Autonomous Systems (1), SIAM J. of Numerical Analysis (1),

Conférences internationales: commande (13)

- [COMM1] Merlet J-P. Use of C-surface based force-feedback algorithm for complex assembly tasks. In *ISER*, Toulouse, http://www-sop.inria.fr/coprin/PDF/merlet_iser91.pdf, 25-27 Juin 1991
- [COMM2] Espiau B., Merlet J-P., et Samson C. Force-feedback control and non contact sensing: a unified approach. In *RoManSy*, Cracovie, http://www-sop.inria.fr/coprin/PDF/merlet_romansy90.pdf, 1990.
- [COMM3] Merlet J-P. A new concept of force-feedback controlled robot for assembly automation. In *9th ICAA*, Londres, 15-17 Mars 1988
- [COMM4] Merlet J-P. C-surface theory applied to the design of an hybrid force-position robot controller. In *IEEE Int. Conf. on Robotics and Automation*, Raleigh, North Carolina, 30 Mars-3 Avril, 1987
- [COMM5] Merlet J-P. Force-feedback control of parallel kinematic manipulators. In *NATO Workshop on Kinematics and Dynamics Issues in sensor based control of manipulators*, pages 143–160, Il Ciocco, Italie, 25-31 Octobre 1987
- [COMM6] Merlet J-P. et Yoshikawa T. An advanced assembly workstation using multiple sensors. In *7th ICAA*, Zurich, 4-6 Février 1986
- [COMM7] Merlet J-P. C-surface theory applied to force-feedback command of robots. In *RoManSy*, Cracovie, 9-12 Septembre 1986
- [COMM8] Merlet J-P. Programming tool for force-feedback command of robots. In *NATO Workshop*, Pise, September 1986.
- [COMM9] Merlet J-P. Trends in force-feedback command for robot assembly tasks. In *8th BRA*, Birmingham, 14-17 Mai 1985
- [COMM10] Merlet J-P. Part mating through non-linear minimization method. In *5th ICAA*, Paris, 22-24 Mai 1984
- [COMM11] Merlet J-P. Some considerations on feedback strategy for assembly robots. In *RoManSy*, Udine, 26-29 Juin 1984
- [COMM12] Merlet J-P. A new method to insert a peg in a hole. In *4th ICAA*, Tokyo, 11-13 Octobre 1983
- [COMM13] Merlet J-P. Using force-feedback for the assembly of a flexible peg. In *RoViSec 3*, Cambridge, Mass., 7-10 Novembre 1983

Conférences internationales: robotique, mécanisme (9)

- [1] Oetomo D., Daney D., Harada K., Merlet J-P., et Dario P. Topology design of surgical reconfigurable robots by interval analysis. In *IEEE Int. Conf. on Robotics and Automation*, pages 3085–3090, Kobe, <http://www-sop.inria.fr/coprin/PDF/icra2009.pdf>, 14-16 Mai 2009
- [2] Oetomo D., Daney D., Harada K., Merlet J.-P., Menciassi A., et Dario P. Topology design of surgical reconfigurable robots by interval analysis. In *IEEE Int. Conf. on Robotics and Automation*, pages 3085–3090, Kobe, 14-16 Mai 2009
- [3] Liem K., Kecskemethy A., et Merlet J-P. Hexaspine : A parallel platform for physical cervical spine simulation - design and interval-based verification. In *12th IFToMM World Congress in Mechanism and Machine Science*, Besancon, 17-21 Juin 2007
- [4] Fang H. et Merlet J-P. Dynamic interference avoidance of 2-dof robot arms using interval analysis. In *IEEE Int. Conf. on Intelligent Robots and Systems (IROS)*, Alberta, http://www-sop.inria.fr/coprin/PDF/fang_merlet_iros2005.pdf, 2-6 Août 2005
- [5] Lee E., Mavroidis C., et Merlet J-P. Five precision points synthesis of spatial RRR manipulators using interval analysis. In *ASME 27th Biennial Mechanisms and Robotics Conf.*, Montréal, http://www-sop.inria.fr/coprin/PDF/merlet_asme2004.pdf, 29 Septembre-2 Octobre, 2002
- [6] Merlet J-P. Kinematic analysis of suspension mechanisms. In *29th ISATA*, Florence, 3-6 Juin 1996
- [7] Ponce J., Sudsang A., Sullivan S., Faverjon B., Boissonnat J-D., et Merlet J-P. Algorithms for computing force-closure grasps of polyhedral objects. In *Workshop on the Algorithmic Foundations of Robotics*, pages 167–184, San-Francisco, 17-19 Février 1994
- [8] Ponce J., Sullivan S., Boissonnat J-D., et Merlet J-P. On characterizing and computing three- and four-finger force-closure grasps of polyhedral objects. In *IEEE Int. Conf. on Robotics and Automation*, Atlanta, 2-7 Mai 1993
- [9] Merlet J-P., Mouly N., Borrelly J-J., et Itay P. A robotic cell for deburring of polygonal object. In *ISER*, Kyoto, http://www-sop.inria.fr/coprin/PDF/merlet_iser93.pdf, 28-30 Octobre 1993

Conférences internationales: robots parallèles (104)

- [RP1] Ramadour R., Chaumette F., et Merlet J-P. Grasping objects with a cable-driven parallel robot designed for transfer operation by visual servoing. In *IEEE Int. Conf. on Robotics and Automation*,

- pages 4463–4468, Hong-Kong, http://www-sop.inria.fr/coprin/PDF/aim2014_ramadour.pdf, 31 Mai-7 Juin, 2014
- [RP2] Ramadour R. et Merlet J-P. Computing safe trajectories for an assistive cable-driven parallel robot by selecting the cables under tension and using interval analysis. In *IEEE/ASME Int. Conf. on Advanced Intelligent Mechatronics*, pages 1349–1354, Besancon, 8-11 Juillet 2014
- [RP3] Merlet J-P. On the redundancy of cable-driven parallel robots. In *5th European Conf. on Mechanism Science (Eucomes)*, pages 31–39, Guimares, http://www-sop.inria.fr/coprin/PDF/merlet_eucomes2014.pdf, 16-19 Septembre 2014
- [RP4] Merlet J-P. The forward kinematics of cable-driven parallel robots with sagging cables. In *2nd Int. Conf. on cable-driven parallel robots (Cable-Con)*, pages 3–16, Duisburg, http://www-sop.inria.fr/coprin/PDF/merlet_cablecon2014.pdf, 24-27 Août 2014
- [RP5] Merlet J-P. Checking the cable configuration of cable-driven parallel robots on a trajectory. In *IEEE Int. Conf. on Robotics and Automation*, pages 1586–1591, Hong-Kong, http://www-sop.inria.fr/coprin/PDF/merlet_icra2014.pdf, 31 Mai-7 Juin, 2014
- [RP6] Merlet J-P. The influence of discrete-time control on the kinematico-static behavior of cable-driven parallel robot with elastic cables. In *ARK*, pages 113–121, Ljubljana, http://www-sop.inria.fr/coprin/PDF/merlet_ark2014.pdf, 29 Juin-3 Juillet, 2014
- [RP7] Lamine H., Bennour S., Merlet J-P., et Romdhane L. Workspace evaluation for a cable based gait trainer robot. In *Troisième Congrès Tunisien de Mécanique*, Sousse, 24-26 Mars 2014
- [RP8] Blanchet L. et Merlet J-P. Interference detection for cable-driven parallel robots (CDPRs). In *IEEE/ASME Int. Conf. on Advanced Intelligent Mechatronics*, pages 1413–1418, Besancon, http://www-sop.inria.fr/coprin/PDF/aim_blanchet2014.pdf, 8-11 Juillet 2014
- [RP9] A. Berti, Merlet J-P., et Carricato M. Workspace analysis of redundant cable-suspend parallel robots. In *2nd Int. Conf. on cable-driven parallel robots (CableCon)*, pages 41–54, Duisburg, 24-27 Août 2014
- [RP10] Merlet J-P. Kinematic analysis of the 4-3-1 and 3-2-1 wire-driven parallel crane. In *IEEE Int. Conf. on Robotics and Automation*, pages 4620–4625, Karlsruhe, 6-10 Mai 2013
- [RP11] Merlet J-P. Further analysis of the 2-2 wire-driven parallel crane. In *Computational Kinematics*, Barcelona, http://www-sop.inria.fr/coprin/PDF/ck_merlet2013.pdf, 12-15 Mai 2013

- [RP12] Merlet J-P. Comparison of actuation schemes for wire-driven parallel robots. In *4th European Conf. on Mechanism Science (Eucomes)*, pages 245–254, Santander, <http://www-sop.inria.fr/coprin/PDF/eucomes2012.pdf>, 19-21 Septembre 2012
- [RP13] Merlet J-P. Managing the redundancy of N-1 wire-driven parallel robots. In *ARK*, pages 405–412, Innsbruck, <http://www-sop.inria.fr/coprin/PDF/ark2012.pdf>, 25-28 Juin 2012
- [RP14] Merlet J-P. The kinematics of the redundant N-1 wire driven parallel robot. In *IEEE Int. Conf. on Robotics and Automation*, pages 2313–2318, Saint Paul, <http://www-sop.inria.fr/coprin/PDF/icra2012.pdf>, 14-18 Mai 2012
- [RP15] Merlet J-P. On the accuracy of N-1 wire-driven parallel robots. In *RoManSy*, pages 1–10, Paris, <http://www-sop.inria.fr/coprin/PDF/romansy2012.pdf>, 12-15 Juin 2012
- [RP16] Berti A., Merlet J-P., et Carricato M. Solving the direct geometrico-static problem of the 3-3 cable-driven parallel robots by interval analysis: preliminary results. In *1st Int. Conf. on cable-driven parallel robots (CableCon)*, pages 251–268, Stuttgart, http://www-sop.inria.fr/coprin/PDF/berti_cableconf_2012.pdf, 3-4 Septembre 2012
- [RP17] Merlet J-P. et al. Siropa: singularités des robots parallèles. In *Colloque ANR*, Paris, 11-12 Janvier 2011
- [RP18] Carricato M. et Merlet J-P. Direct geometrico-static problem of under-constrained cable-driven parallel robots with three cables. In *IEEE Int. Conf. on Robotics and Automation*, pages 3011–3017, Shangai, http://www-sop.inria.fr/coprin/PDF/carricato_merlet_icra2011.pdf, 9-13 Mai 2011
- [RP19] Bennour S., Harshe M., Romdhane L., et Merlet J-P. A robotic application for analysis and control of human motion. In *4eme Congrès International Conception et Modélisation des Systèmes Mécaniques CMSM*, Sousse, 30 Mai-1 Juin, 2011
- [RP20] Bennour S., Romdhane L., Merlet J-P., et Harshe M. Nouvelle machine robotisée à base d’une plateforme à câbles pour la rééducation fonctionnelle. In *20ème Congrès Français de Mécanique*, Besancon, <http://www-sop.inria.fr/coprin/PDF/cfm2011.pdf>, 28 Août-2 Septembre, 2011
- [RP21] Merlet J-P. et Daney D. A portable, modular parallel wire crane for rescue operations. In *IEEE Int. Conf. on Robotics and Automation*, pages 2834–2839, Anchorage, <http://www-sop.inria.fr/coprin/PDF/icra2010.pdf>, 3-8 Mai 2010

- [RP22] Merlet J-P. MARIONET, a family of modular wire-driven parallel robots. In *ARK*, pages 53–62, Piran, <http://www-sop.inria.fr/coprin/PDF/ark2010.pdf>, 28 Juin-1 Juillet, 2010
- [RP23] Carricato M. et Merlet J-P. Geometrico-static analysis of under-constrained cable-driven parallel robot. In *ARK*, pages 309–320, Piran, http://www-sop.inria.fr/coprin/PDF/ark_carricato_2010.pdf, 28 Juin-1 Juillet, 2010
- [RP24] Merlet J-P. Kinematic analysis of a spatial four-wire driven parallel crane without constraining mechanism. In *Computational Kinematics*, pages 1–8, Duisburg, <http://www-sop.inria.fr/coprin/PDF/ck2009.pdf>, 6-8 Mai 2009
- [RP25] Tavolieri C., Ceccarelli M., et Merlet J-P. A workspace analysis of a fully constrained cable-based parallel manipulator by using interval analysis. In *Musme*, San Juan, Argentina, 8-12 Avril 2008
- [RP26] N. Ramdani, Gouttefarde M., Pierrot F., et Merlet J-P. First results on the design of high speed parallel robots in presence of uncertainty. In *IEEE Int. Conf. on Intelligent Robots and Systems (IROS)*, pages 2410–2415, Nice, France, http://www-sop.inria.fr/coprin/PDF/ramdani_merlet_icra2008.pdf, 22-26 Septembre 2008
- [RP27] Oetomo D., Daney D., Shirinzadeh B., et Merlet J-P. Certified workspace analysis of 3RRR planar parallel flexure mechanism. In *IEEE Int. Conf. on Robotics and Automation*, pages 3838–3843, Pasadena, http://www-sop.inria.fr/coprin/PDF/oetomo_merlet_icra_2008.pdf, 19-23 Mai 2008
- [RP28] Merlet J-P. Analysis of wire elasticity for wire-driven parallel robots. In *2nd European Conf. on Mechanism Science (Eucomes)*, pages 471–478, Cassino, http://www-sop.inria.fr/coprin/PDF/merlet_eucomes2008.pdf, 17-20 Septembre 2008
- [RP29] Merlet J-P. Kinematics of the wire-driven parallel robot MARIONET using linear actuators. In *IEEE Int. Conf. on Robotics and Automation*, Pasadena, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2008.pdf, 19-23 Mai 2008
- [RP30] Hubert J. et Merlet J-P. Singularity analysis through static analysis. In *ARK*, pages 13–20, Batz/mer, 23-26 Juin 2008
- [RP31] Merlet J-P. A local motion planner for closed-loop robots. In *IEEE Int. Conf. on Intelligent Robots and Systems (IROS)*, pages 3088–3093, San Diego, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2007.pdf, 22-26 Septembre 2007

- [RP32] Merlet J-P. et Daney D. A new design for wire-driven parallel robot. In *2nd Int. Congress, Design and Modelling of mechanical systems*, Monastir, 19-21 Mars 2007
- [RP33] Liem K., Kecskeméthy A., et Merlet J-P. Hexaspine: A parallel platform for physical cervical spine simulation - design and interval-based verification. In *12th IFToMM World Congress on the Theory of Machines and Mechanisms*, Besancon, 18-21 Juin 2007
- [RP34] Gouttefarde M., Merlet J-P., et Daney D. Wrench-feasible workspace of parallel cable-driven mechanisms. In *IEEE Int. Conf. on Robotics and Automation*, pages 1492–1497, Roma, http://www-sop.inria.fr/coprin/PDF/gouttefarde_merlet_icra2007.pdf, 10-14 Avril 2007
- [RP35] Merlet J-P. et Donelan P. On the regularity of the inverse jacobian of parallel robot. In *ARK*, pages 41–48, Ljubljana, http://www-sop.inria.fr/coprin/PDF/merlet_ark2006.pdf, 26-29 Juin 2006
- [RP36] Merlet J-P. et Daney D. Legs interference checking of parallel robots over a given workspace or trajectory. In *IEEE Int. Conf. on Robotics and Automation*, pages 757–762, Orlando, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2006.pdf, 16-18 Mai 2006
- [RP37] Merlet J-P. Computing the worst case accuracy of a PKM over a workspace or a trajectory. In *5th Chemnitzer Parallelkinematik Seminar*, pages 83–96, Chemnitz, http://www-sop.inria.fr/coprin/PDF/merlet_chemntiz-2006.pdf, 25-26 Avril 2006
- [RP38] Gouttefarde M., Merlet J-P., et Daney D. Determination of the wrench-closure workspace of 6-dof parallel cable-driven mechanisms. In *ARK*, pages 315–322, Ljubljana, 26-29 Juin 2006
- [RP39] Daney D. et al. Calibration of parallel robots: on the elimination of pose-dependent parameters. In *1st European Conf. on Mechanism Science (Eucomes)*, Obergurgl, 21-26 Février 2006
- [RP40] Merlet J-P. Jacobian, manipulability, condition number and accuracy of parallel robots. In *ISRR*, San Francisco, http://www-sop.inria.fr/coprin/PDF/merlet_isrr2005.pdf, 12-15 Octobre 2005
- [RP41] Merlet J-P. Optimal design of robots. In *Robotics: Science and Systems*, Boston, http://www-sop.inria.fr/coprin/PDF/merlet_rss2005.pdf, 8-11 Juin 2005
- [RP42] Merlet J-P. et Daney D. Dimensional synthesis of parallel robots with a guaranteed given accuracy over a specific workspace. In *IEEE Int. Conf. on Robotics and Automation*, Barcelona, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2005.pdf, 19-22 Avril 2005

- [RP43] Merlet J-P. et Daney D. Kinematics and synthesis of cams-coupled parallel robots. In *Computational Kinematics*, Cassino, http://www-sop.inria.fr/coprin/PDF/merlet_ck_2005.pdf, 4-6 Mai 2005
- [RP44] Blanchard L., Falzon F., Dupuis J., et Merlet J-P. Deployable hexapod using tape-springs. In *Disruption in Space, ESA/CNES Symp.*, Marseille, 2005.
- [RP45] Merlet J-P. Analysis of the influence of wire interference on the workspace of wire robots. In *ARK*, pages 211–218, Sestri-Levante, http://www-sop.inria.fr/coprin/PDF/merlet_ark2004.pdf, 28 Juin-1 Juillet, 2004
- [RP46] Merlet J-P. Guaranteed in-the-workspace improved trajectory/surface/volume verification for parallel robots. In *IEEE Int. Conf. on Robotics and Automation*, New Orleans, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2004.pdf, 28-30 Avril 2004
- [RP47] Merlet J-P. Getting exact information from the inverse jacobian matrix of parallel and serial robots. In *11th IFToMM World Congress on the Theory of Machines and Mechanisms*, pages 1951–1955, Tianjin, http://www-sop.inria.fr/coprin/PDF/merlet_iftomm2003-4.pdf, 1-4 Avril 2004
- [RP48] Chablat D., Wenger P., et Merlet J-P. A comparative study between two three-dof parallel kinematic machines using kinetostatic criteria and interval analysis. In *11th IFToMM World Congress on the Theory of Machines and Mechanisms*, pages 1209–1213, Tianjin, 1-4 Avril 2004
- [RP49] Merlet J-P. Determination of the optimal geometry of modular parallel robots. In *IEEE Int. Conf. on Robotics and Automation*, Taipei, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2003.pdf, 14-19 Septembre 2003
- [RP50] Merlet J-P. Still a long way to go on the road for parallel mechanisms. In *ASME 27th Biennial Mechanisms and Robotics Conf.*, Montréal, http://www-sop.inria.fr/coprin/PDF/merlet_asme_2002.pdf, 29 Septembre-2 Octobre, 2002
- [RP51] Merlet J-P. Optimal design for the micro robot MIPS. In *IEEE Int. Conf. on Robotics and Automation*, Washington, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2002.pdf, 11-15 Mai 2002
- [RP52] Merlet J-P. A general methodology for certified evaluation of the performances of parallel robots. In *1st Int. Colloquium, Collaborative Research Centre 562*, pages 97–106, Braunschweig, http://www-sop.inria.fr/coprin/PDF/merlet_braunschweig2002.pdf, 29-30 Mai 2002

- [RP53] Chablat D., Wenger P., et Merlet J-P. Workspace analysis of the Orthoglide using interval analysis. In *ARK*, pages 397–406, Caldes de Malavalla, 29 Juin-2 Juillet, 2002
- [RP54] Merlet J-P. Micro parallel robot MIPS for medical applications. In *IEEE Int. Conf. on Emerging Technologies and Factory Automation*, Antibes, 15-18 Octobre 2001
- [RP55] Merlet J-P. System-solving and parallel robots. In *Workshop on Robot Mechanics*, Paris, http://www-sop.inria.fr/coprin/PDF/merlet_roth2001.pdf, 12-13 Juillet 2001
- [RP56] Merlet J-P. et Daney D. A formal-numerical approach to determine the presence of singularity within the workspace of a parallel robot. In F.C. Park C.C. Iurascu, Editeur, *Computational Kinematics*, pages 167–176. EJCK, Seoul, 20-22 Mai 2001
- [RP57] Merlet J-P. An improved design algorithm based on interval analysis for parallel manipulator with specified workspace. In *IEEE Int. Conf. on Robotics and Automation*, pages 1289–1294, Seoul, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2001.pdf, 23-25 Mai 2001
- [RP58] Merlet J-P. An efficient trajectory verifier for motion planning of parallel machine. In *Parallel Kinematic Machines Int. Conf.*, Ann Arbor, 14-15 Septembre 2000
- [RP59] Merlet J-P. On the separability of the solutions of the direct kinematics of a special class of planar 3-RPR parallel manipulator. In *26th ASME Biennial Mechanisms and Robotics Conference*, Baltimore, http://www-sop.inria.fr/coprin/PDF/merlet_asme_detc2000.pdf, 10-13 Septembre 2000
- [RP60] Merlet J-P. A formal-numerical approach to determine the accuracy of a parallel robot in a 6D workspace. In *13th RoManSy*, pages 51–58, Zakopane, http://www-sop.inria.fr/coprin/PDF/merlet_romansy2000.pdf, 3-6 Juillet 2000
- [RP61] Merlet J-P., Perng M-W., et Daney D. Optimal trajectory planning of a 5-axis machine tool based on a 6-axis parallel manipulator. In *ARK*, pages 315–322, Piran, http://www-sop.inria.fr/coprin/PDF/merlet_ark2000.pdf, 25-29 Juin 2000
- [RP62] Merlet J-P. Forward kinematics of parallel robots. In *IMACS Conf. on Applications of Computer Algebra*, El Escorial, 24-27 Juin 1999
- [RP63] Merlet J-P. Finding the extrema of the leg lengths of a Gough-type parallel robot when the platform is moving in a given 6D workspace. In *10th IFToMM World Congress on the Theory of Machines and Mechanisms*, pages 86–91, Oulu, http://www-sop.inria.fr/coprin/PDF/merlet_iftomm99.pdf, 20-24 Juin 1999

- [RP64] Merlet J-P. Designing a parallel structure for a milling machine. In *Rencontre Franco-Israelienne sur la Robotique*, Besancon, 13-14 Mai 1998
- [RP65] Merlet J-P. Determination of 6D workspaces of a Gough-type 6 d.o.f. parallel manipulator. In *12th RoManSy*, pages 261–268, Paris, http://www-sop.inria.fr/coprin/PDF/merlet_romansy98.pdf, 6-9 Juillet 1998
- [RP66] Merlet J-P. Determination of the presence of singularities in 6D workspace of a Gough parallel manipulator. In *ARK*, pages 39–48, Strobl, http://www-sop.inria.fr/coprin/PDF/merlet_ark98.pdf, 29 Juin-4 Juillet, 1998
- [RP67] Merlet J-P. Efficient estimation of the extremal articular forces of a parallel manipulator in a translation workspace. In *IEEE Int. Conf. on Robotics and Automation*, pages 1982–1987, Louvain, http://www-sop.inria.fr/coprin/PDF/merlet_ieee98-force.pdf, 18-20 Mai 1998
- [RP68] Merlet J-P. Efficient computation of the extremum of the articular velocities of a parallel manipulator in a translation workspace. In *IEEE Int. Conf. on Robotics and Automation*, pages 1976–1981, Louvain, http://www-sop.inria.fr/coprin/PDF/merlet_ieee98-vitesse.pdf, 18-20 Mai 1998
- [RP69] Merlet J-P. Determination of the presence of singularities in a workspace volume of a parallel manipulator. In *NATO-ASI, Computational methods in mechanisms*, Sts. Konstantin and Elena Resort, http://www-sop.inria.fr/coprin/PDF/merlet_bulgarie97-1.pdf, 16-28 Juin 1997
- [RP70] Merlet J-P. Miniature in-parallel positioning system MIPS for minimally invasive surgery. In *World Congress on Medical Physics and Biomedical Engineering*, Nice, http://www-sop.inria.fr/coprin/PDF/merlet_GBM97.pdf, 14-19 Septembre 1997
- [RP71] Merlet J-P. Democrat: A DEsign Methodology for the Conception of robots with parallel ArchiTecture. In *IROS*, pages 1630–1636, Grenoble, http://www-sop.inria.fr/coprin/PDF/merlet_iros97.pdf, 7-11 Septembre 1997
- [RP72] Merlet J-P. First experiments with MIPS 1 (Mini In-Parallel Positioning System). In *ISER*, pages 372–379, Barcelone, http://www-sop.inria.fr/coprin/PDF/merlet_iser97.pdf, 15-18 Juin 1997
- [RP73] Merlet J-P. Articular velocities of parallel manipulators, Part II: Finding all the robots with fixed extremal articular velocity for performing a fixed cartesian velocity over a whole workspace. In *IEEE Int. Conf. on Robotics and Automation*, pages 3262–3267, Albuquerque, http://www-sop.inria.fr/coprin/PDF/merlet_ieee97-2.pdf, 21-28 Avril 1997

- [RP74] Chételat O., Merlet J-P., Myszkowski P., et Longchamp R. Globally convergent iterative algorithms for the coordinate transformations in the articulated mechanisms. In *Syroco*, Nantes, Septembre 1997
- [RP75] Merlet J-P. Designing a parallel manipulator for a specific workspace. In *ISRAM*, pages 441–446, Montpellier, 28-30 Mai 1996
- [RP76] Merlet J-P. Some algebraic problems arising in the field of mechanisms theory. In *Progress in Mathematics*, volume 143. Birkhäuser Verlag, 1996.
- [RP77] Merlet J-P., Gosselin C., et Mouly N. Workspaces of planar parallel manipulators. In *11th RoManSy*, pages 37–44, Udine, http://www-sop.inria.fr/coprin/PDF/merlet_romansy96.pdf, 1-4 Juillet 1996
- [RP78] Merlet J-P. Workspace-oriented methodology for designing a parallel manipulator. In *IDMME*, Nantes, 15-17 Avril 1996
- [RP79] Merlet J-P. Workspace-oriented methodology for designing a parallel manipulator. In *IEEE Int. Conf. on Robotics and Automation*, pages 3726–3731, Minneapolis, http://www-sop.inria.fr/coprin/PDF/merlet_ieee96.pdf, 24-26 Avril 1996
- [RP80] Merlet J-P. Direct kinematics of planar parallel manipulators. In *IEEE Int. Conf. on Robotics and Automation*, pages 3744–3749, Minneapolis, http://www-sop.inria.fr/coprin/PDF/merlet_ieee96-2.pdf, 24-26 Avril 1996
- [RP81] Gosselin C., Lemieux S., et Merlet J-P. A new architecture of planar three-degree-of-freedom parallel manipulator. In *IEEE Int. Conf. on Robotics and Automation*, pages 3738–3743, Minneapolis, http://www-sop.inria.fr/coprin/PDF/gosselin_merlet_icra96.pdf, 24-26 Avril 1996
- [RP82] Arai T., Tanikawa T., Merlet J-P., et Sendai T. Development of a new parallel manipulator with fixed linear actuator. In *Japan-USA Symp. on Flexible Automation*, pages 145–149, Boston, 7-10 Juillet 1996
- [RP83] Tancredi L., Teillaud M., et Merlet J-P. Extra sensors data for solving the forward kinematics problem of parallel manipulators. In *9th IFToMM World Congress on the Theory of Machines and Mechanisms*, pages 2122–2126, Milan, 30 Août-2 Septembre, 1995
- [RP84] Tancredi L., Teillaud M., et Merlet J-P. Forward kinematics of a parallel manipulator with additional rotary sensors measuring the position of platform joints. In J-P. Merlet B. Ravani, Editeur, *Computational Kinematics*, pages 261–270. Kluwer, 1995.
- [RP85] Merlet J-P. Designing a parallel robot for a specific workspace. In J-P. Merlet B. Ravani, Editeur, *Computational Kinematics*, pages 203–212. Kluwer, http://www-sop.inria.fr/coprin/PDF/merlet_ck95.pdf, 1995.

- [RP86] Tancredi L. et Merlet J-P. Evaluation of the errors when solving the direct kinematics of parallel manipulators with extra sensors. In Lenarčič J. et Ravani B., Editeurs, *ARK*, pages 439–448, Ljubljana, 4-6 Juillet 1994
- [RP87] Merlet J-P. Some algebraic problems arising in the field of mechanisms theory. In *MEGA*, Santander, http://www-sop.inria.fr/coprin/PDF/merlet_mega94.pdf, 5-9 Avril 1994
- [RP88] Merlet J-P. Trajectory verification in the workspace of parallel manipulators. In *IEEE Int. Conf. on Robotics and Automation*, pages 2166–2171, San Diego, http://www-sop.inria.fr/coprin/PDF/merlet_ieee94.pdf, 8-13 Mai 1994
- [RP89] Lazard D. et Merlet J-P. The (true) Stewart platform has 12 configurations. In *IEEE Int. Conf. on Robotics and Automation*, pages 2160–2165, San Diego, http://www-sop.inria.fr/coprin/PDF/lazard_merlet_ieee94.pdf, 8-13 Mai 1994
- [RP90] Merlet J-P. Parallel manipulators: state of the art and perspective. In Takamori T. et Tsuchiya K., Editeurs, *Robotics, Mechatronics and Manufacturing Systems*. Elsevier, 1993.
- [RP91] Merlet J-P. Orientation workspace of a parallel manipulator with a fixed point. In *ICAR*, pages 141–146, Tokyo, http://www-sop.inria.fr/coprin/PDF/merlet_icar93.pdf, 1-2 Novembre 1993
- [RP92] Merlet J-P. Algebraic geometry for the study of kinematics of parallel manipulators. In J. Angeles P. Kovacs, G. Hommel, Editeur, *Computational Kinematics*, pages 183–194. Kluwer, http://www-sop.inria.fr/coprin/PDF/merlet_ck93.pdf, 1993.
- [RP93] Merlet J-P. Closed-form resolution of the direct kinematics of parallel manipulators using extra sensors data. In *IEEE Int. Conf. on Robotics and Automation*, pages 200–204, Atlanta, http://www-sop.inria.fr/coprin/PDF/merlet_ieee93.pdf, 2-7 Mai 1993
- [RP94] Mouly N. et Merlet J-P. Singular configurations and direct kinematics of a new parallel manipulator. In *IEEE Int. Conf. on Robotics and Automation*, pages 338–343, Nice, http://www-sop.inria.fr/coprin/PDF/merlet_mouly_ieee92.pdf, 12-14 Mai 1992
- [RP95] Merlet J-P. Geometrical determination of the workspace of a constrained parallel manipulator. In *ARK*, pages 326–329, Ferrare, http://www-sop.inria.fr/coprin/PDF/merlet_ark92.pdf, 7-9 Septembre 1992
- [RP96] Merlet J-P. On the infinitesimal motion of a parallel manipulator in singular configurations. In *IEEE Int. Conf. on Robotics and Automation*, pages 320–325, Nice, http://www-sop.inria.fr/coprin/PDF/merlet_icra92.pdf, 12-14 Mai 1992

- [RP97] Arai T., Stoughton R., et Merlet J-P. Teleoperator assisted hybrid control for parallel link manipulator and its application to assembly task. In *Int. Symp. on Measurement and Control in Robotics, ISMCR'92*, pages 817–822, Tsukuba, 15-19 Novembre 1992
- [RP98] Merlet J-P. An algorithm for the forward kinematics of general parallel manipulators. In *ICAR*, pages 1131–1135, Pise, http://www-sop.inria.fr/coprin/PDF/merlet_icar91.pdf, 19-22 Juin 1991
- [RP99] Merlet J-P. Symbolic computation for the determination of the minimal direct kinematics polynomial and the singular configurations of parallel manipulators. In *ARK*, Linz, http://www-sop.inria.fr/coprin/PDF/merlet_ark90.pdf, 10-12 Septembre 1990
- [RP100] Merlet J-P. Assembly modes and direct kinematics of parallel manipulators. In *ISRAM*, volume 3, pages 43–48, Burnaby, 18-20 Juillet 1990 http://www-sop.inria.fr/coprin/PDF/merlet_isram90.pdf, ASME Press Series.
- [RP101] Merlet J-P. Assembly modes and minimal polynomial formulation of the direct kinematics of parallel manipulators. In *CSME Mechanical Engineering Forum 1990*, pages 343–348, Toronto, http://www-sop.inria.fr/coprin/PDF/merlet_csme90.pdf, 3-9 Juin 1990
- [RP102] Merlet J-P. Singular configurations of parallel manipulators and Grassmann geometry. In Boissonnat J-D. et J-P.Laumond, Editeurs, *Geometry and Robotics*, volume LNCS 391, pages 194–212. Springer-Verlag, 1989.
- [RP103] Merlet J-P. Force-feedback control of parallel manipulators. In *IEEE Int. Conf. on Robotics and Automation*, pages 1484–1489, Philadelphia, 24-29 Avril 1988
- [RP104] Merlet J-P. Kinematics, singular configurations and compliance of parallel manipulators. In *ICAR*, pages 125–136, Versailles, 13-15 Octobre 1987

Conférences internationales: assistance et biomécanique (10)

- [A1] Wang C., T. anf Dune, Merlet J-P., et al. A new application of smart walker for quantitative analysis of human walking. In *Second Workshop on Assistive Computer Vision and Robotics*, Zurich, 12 Septembre 2014
- [A2] Merlet J-P. A low-cost and socially acceptable approach of assistance robotics for elderly people. In *The Israeli Conference on Robotics*, Tel-Aviv, 19-20 Novembre 2013

- [A3] Merlet J-P. Using a robotized aid for walking analysis: experiments and preliminary results. In *IEEE Int. Conf. on Intelligent Robots and Systems (IROS), Workshop Assistance and Service Robotics in a Human Environment*, Tokyo, 3-8 Novembre 2013
- [A4] Merlet J-P. ANG, a family of multi-mode, low cost walking aid. In *IEEE Int. Conf. on Intelligent Robots and Systems (IROS), Workshop Assistance and Service Robotics in a Human Environment*, Vilamoura, http://www-sop.inria.fr/coprin/PDF/trans_iros2012.pdf, 7-12 Octobre 2012
- [A5] Dune C., Gorce P., et Merlet J-P. Can smart rollators be used for gait monitoring and fall prevention ? In *Workshop Assistance and Service Robotics in a Human Environment, IEEE/RSJ International Conference on Intelligent Robots and Systems*, Vilamoura, 2012.
- [A6] Merlet J-P. Activities of the INRIA project-team COPRIN in at-home assistance. In *European Robotics Forum*, Vasteras, http://www-sop.inria.fr/coprin/PDF/workshop_euron_2011.pdf, 6-8 Avril 2011
- [A7] Harshe M., Merlet J-P., Daney D., et Bennour S. A multi-sensors system for human motion measurement: Preliminary setup. In *13th IFToMM World Congress on the Theory of Machines and Mechanisms*, Guanajuato, http://www-sop.inria.fr/coprin/PDF/wciftomm2011_mandar.pdf, 19-25 Juin 2011
- [A8] Merlet J-P. Preliminary design of ANG, a low-cost automated walker for elderly. In *3rd European Conf. on Mechanism Science (Eucomes)*, Cluj-Napoca, http://www-sop.inria.fr/coprin/PDF/eucomes_2010.pdf, 14-17 September 2010.
- [A9] Bennour S., Romdhane L., et Merlet J-P. Contrôle du membre inférieur pour un mouvement de la marche. In *CMSM*, Hammamet, 16-18 Mars 2009
- [A10] Bennour S., Romdhane L., et Merlet J-P. Application robotique pour la rééducation fonctionnelle de la cheville. In *Congrès Français de Mécanique*, Marseille, 24-28 Août 2009

Conférences internationales: mathématiques et divers (10)

- [MA1] Merlet J-P. Managing uncertainties in kinematics. In *SIAM 2010 Annual Meeting*, Pittsburgh, 12-16 Juillet 2010 Invited talk.
- [MA2] Merlet J-P. Managing uncertainties in robotics with interval analysis. In *Ninth International Workshop on the Algorithmic Foundations of Robotics (WAFR)*, Singapore, 13-15 Décembre 2010 Invited talk.

- [MA3] Merlet J-P. Influence of uncertainties on ultrasonic localization systems. In *Small Workshop on Interval Methods (SWIM)*, Montpellier, 19-20 Juin 2008
- [MA4] Merlet J-P. Interval analysis and robotics. In *13th International Symposium of Robotics Research*, Hiroshima, 26-29 Novembre 2007
- [MA5] Merlet J-P. Applications of interval analysis in robotics. In *Interval methods and their applications*, Copenhagen, 25-27 Août 2005
- [MA6] Merlet J-P. Systems of distance equations: application to robotics. In *Applications of interval analysis*, Sitges, 1 Octobre 2005
- [MA7] Papegay Y., Daney D., et Merlet J-P. Parallel implementation of interval analysis for equations solving. In *EuroPVM/MPI 2003*, Venice, 2003. published in Lecture Notes in Computer Sciences 2840, Springer Verlag.
- [MA8] Merlet J-P. Usual and unusual applications of interval analysis. In *Proc of 2nd International Workshop on Global Constrained Optimization and Constraint Satisfaction (COCOS'03)*, Lausanne, 2003.
- [MA9] Neumaier A. et Merlet J-P. Solving real-life robotics problems with interval techniques. In *SIAM Workshop on Validated Computing*, page 148, Toronto, 23-25 Mai 2002
- [MA10] Merlet J-P. Determination of the minimal and maximal real roots of parametric polynomials using interval analysis. In *1st Int. Workshop on Global Constrained Optimization and Constraint Satisfaction (Cocos'02)*, Valbonne, 2-4 Octobre 2002 Published in LNCS Volume 2861 / 2003, pp. 71-86.

Conférences internationales: histoire (2)

- [1] Merlet J-P. A note on the history of trigonometric functions. In Ceccarelli M., Editeur, *International Symposium on History of Machines and Mechanisms, HMM2004*, pages 195–200. Kluwer, 2004.
- [2] Merlet J-P. An historical perspective of robotics. In Ceccarelli M., Editeur, *International Symposium on History of Machines and Mechanisms, HMM2000*, pages 379–386. Kluwer, 2000.

Conférences invités (18)

- [CI1] Merlet J-P. Robotique et assistance à la personne. In *Colloque L'innovation technologique appliquée à la Santé: l'exemple de la Robotique Médicale*, Nice, 26 Juin 2013

- [CI2] Merlet J-P. Robots à câbles, tour d’horizon et défis. In *Journées Nationales de la Recherche en Robotique*, Annecy, http://www-sop.inria.fr/coprin/PDF/trans_jnrr2013.pdf, 16-18 Octobre 2013
- [CI3] Merlet J-P. Robotique ambiante d’assistance. In *2ème colloque CENRob*, Evry, 4-5 Avril 2013
- [CI4] Merlet J-P. Unsolved issues in kinematics and redundancy of wire-driven parallel robots. In *1st Int. Conf. on cable-driven parallel robots (CableCon)*, Stuttgart, http://www-sop.inria.fr/coprin/PDF/trans_cablecon2012.pdf, 3-4 Septembre 2012
- [CI5] Merlet J-P. Wire-driven parallel robots: open issues. In *RoManSy*, Paris, <http://www-sop.inria.fr/coprin/PDF/romansy2012-1.pdf>, 12-15 Juin 2012
- [CI6] Merlet J-P. Mechanism science and assistance to elderly. In *4eme Congrès International Conception et Modélisation des Systèmes Mécaniques CMSM*, Sousse, http://www-sop.inria.fr/coprin/PDF/trans_cmsm_2011.pdf, 30 Mai-1 Juin, 2011
- [CI7] Merlet J-P. Robotique, domotique et constructions. In *1sr Int. Rivieran Meeting on ImmoTIC-DomoTIC*, Sophia-Antipolis, 6-8 Décembre 2007
- [CI8] Merlet J-P. Interval analysis and robotics. In *Twelfth International Conference on Principles and Practice of Constraint Programming CP-2006*, Nantes, 2006.
- [CI9] Merlet J-P. The necessity of optimal design for parallel machines and a possible certified methodology. In *2nd Int. Colloquium, Collaborative Research Centre 562*, pages 7–20, Braunschweig, http://www-sop.inria.fr/coprin/PDF/merlet_braunschweig_2005.pdf, 10-11 Mai 2005
- [CI10] Merlet J-P. An initiative for the kinematic study of parallel manipulators. In *Workshop on Fundamental Issues and Future Research Directions for Parallel Mechanisms and Manipulators*, pages 2–9, Québec, http://www-sop.inria.fr/coprin/PDF/merlet_workshop_quebec_2002.pdf, 3-4 Octobre 2002
- [CI11] Merlet J-P. The need for a systematic methodology for the evaluation and optimal design of parallel manipulators. In *3rd Chemnitzer Parallelkinematik Seminar*, pages 49–62, Chemnitz, http://www-sop.inria.fr/coprin/PDF/merlet_chemntiz2002.pdf, 23-25 Avril 2002
- [CI12] Merlet J-P. Perspectives à court et moyen terme pour la robotique. In *Rencontre internationale de prospective du Sénat*, Paris, 27 Juin 2001
- [CI13] Merlet J-P. Kinematics is not dead. In *IEEE Int. Conf. on Robotics and Automation*, San-Francisco, http://www-sop.inria.fr/coprin/PDF/merlet_ieee2000.pdf, 24-28 Mai 2000

- [CI14] Merlet J-P. Parallel robot: open problems. In *9th Int. Symp. of Robotics Research*, Snowbird, http://www-sop.inria.fr/coprin/PDF/merlet_isrr99.pdf, 9-12 Octobre 1999
- [CI15] Merlet J-P. Efficient design of parallel robots. In *New machine concepts for handling and manufacturing devices on the basis of parallel structures*, pages 1–13, Braunschweig, http://www-sop.inria.fr/coprin/PDF/merlet_braunschweig98.pdf, 10-11 Novembre 1998
- [CI16] Merlet J-P. The importance of optimal design for parallel structures. In *First European-American Forum on Parallel Kinematic Machines*, Milan, 31 Août-1 Septembre, 1998
- [CI17] Merlet J-P. Changer les robots. In *Journée Nationale de la Recherche en Robotique*, Toulouse, 6-7 Novembre 1997
- [CI18] Merlet J-P. Parallel manipulators: state of the art and perspective. In *IMACS/SICE Int. Symp. on Robotics, Mechatronics, and Manufacturing Systems*, pages 403–408, Kobe, <http://www-sop.inria.fr/coprin/PDF/imacs92.pdf>, 16-20 Septembre 1992

Conférences nationales (11)

- [1] Merlet J-P. Analyse par intervalles. In *Ecole thématique sur l'arithmétique des ordinateurs*, Dijon, 2003.
- [2] Merlet J-P. Analyse par intervalles et résolution de systèmes. In *Journées Nationales du Calcul Formel*, Marseille, 2003.
- [3] Merlet J-P. Micro-robot parallèle pour la chirurgie minimalement invasive. In *MS4CMS'02*, Rocquencourt, 12-15 Novembre 2002
- [4] Merlet J-P. Méthodes de résolutions et d'analyse d'équations: Applications en robotique. In *Journées Nationales de la Recherche en Robotique*, Giens, 15-17 Octobre 2001
- [5] Merlet J-P. et Dahan M. Le micro-robot parallèle MIPS. In *Quatrième Journées du Pôle Micro-robotique*, Lyon, 4-5 Juillet 2001
- [6] Merlet J-P. ALIAS: an interval analysis based library for solving and analyzing system of equations. In *SEA*, Toulouse, 14-16 Juin 2000
- [7] Merlet J-P. et Dahan M. Un micro-robot parallèle pour l'inspection industrielle et l'endoscopie médicale. In *Troisième Journées du Pôle Micro-robotique*, Cachan, 27-28 Juin 2000
- [8] Merlet J-P. Robot parallèle: Etat de l'art. In *13^{ème} Congrès Français de Mécanique*, volume 1, pages 331–334, Poitiers, http://www-sop.inria.fr/coprin/PDF/merlet_aum97.pdf, 1-5 Septembre 1997

- [9] Merlet J-P. Robots parallèles. In *AF CET RFIA*, pages 569–574, Antibes, 18-20 Novembre 1987
- [10] Merlet J-P. Modélisation de l’univers d’un robot à l’aide de la théorie des C-surfaces. Commande par retour d’efforts. In *Colloque CNRS*, Paris, 15-16 Septembre 1986
- [11] Merlet J-P. Force-feedback command of robots : application to surface following. In *5eme AF CET RFIA*, Grenoble, 25-29 Novembre 1985

Rapports de recherche (17)

- [RR1] Faugère J.C., Merlet J-P., et Rouillier F. On solving the direct kinematics problem for parallel robots. Rapport de Recherche 5923, INRIA, Juin 2006
- [RR2] Pavicic M., Merlet J-P., et Megill N.D. Exhaustive enumeration of Kochen-Specker vector systems. Rapport de Recherche 5388, INRIA, Novembre 2004
- [RR3] Merlet J-P. Estimation efficace des caractéristiques de robots parallèles: Extremums des raideurs et des coordonnées, vitesses, forces articulaires et singularités dans un espace de travail en translation. Rapport de Recherche 3243, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Septembre 1997
- [RR4] Merlet J-P. Modélisation géométrique de mécanismes de suspension automobile. Rapport de Recherche 2817, INRIA, Mars 1996
- [RR5] Chételat O., Myszkorowski P., Longchamp R., et Merlet J-P. Algorithme itératif à convergence démontrée pour les changements de coordonnées des mécanismes articulés. Rapport de Recherche 1996-07, EPFL, Institut d’Automatique, Lausanne, Suisse, Novembre 1996
- [RR6] Merlet J-P. Designing a parallel robot for a specific workspace. Rapport de Recherche 2527, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Avril 1995
- [RR7] Merlet J-P. et Mouly N. Espaces de travail et planification de trajectoire des robots parallèles plans. Rapport de Recherche 2291, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Février 1994
- [RR8] Merlet J-P. Manipulateurs parallèles, 7eme partie : Vérification et planification de trajectoire dans l’espace de travail. Rapport de Recherche 1940, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Juin 1993
- [RR9] Merlet J-P. Manipulateurs parallèles, 6eme partie : Détermination des espaces de travail en orientation. Rapport de Recherche 1921, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Mai 1993

- [RR10] Merlet J-P. Manipulateurs parallèles, 5eme partie : Détermination de l'espace de travail à orientation constante. Rapport de Recherche 1645, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Mars 1992
- [RR11] Merlet J-P. An algorithm for the forward kinematics of general 6 d.o.f. parallel manipulators. Rapport de Recherche 1331, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Novembre 1990
- [RR12] Merlet J-P. Manipulateurs parallèles, 3eme partie : applications. Rapport de Recherche 1003, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Mars 1989
- [RR13] Merlet J-P. Manipulateurs parallèles, 4eme partie : mode d'assemblage et cinématique directe sous forme polynomiale. Rapport de Recherche 1135, INRIA, <http://www.inria.fr/rrrt/index.fr.html>, Décembre 1989
- [RR14] Merlet J-P. Parallel manipulators, Part 2, Singular Configurations and Grassmann geometry. Rapport de Recherche 791, INRIA, Février 1988
- [RR15] Merlet J-P. Parallel manipulators, Part 1, theory. Rapport de Recherche 646, INRIA, Mars 1987
- [RR16] Merlet J-P. Commande par retour d'efforts en robotique. Rapport de Recherche 351, INRIA, 1984.
- [RR17] Merlet J-P. Etude bidimensionnelle de l'insertion d'une cheville souple dans un ensemble rigide. Rapport de Recherche 166, INRIA, October 1982.

Principales abbréviations

Pour les plus importante conférences le nombre de mes publications est indiqué entre parenthèses

ARK: Advances in Robot Kinematics (13)	neering
CP: Int. Conf. on Principles and Practice of Constraint Programming	IJRR: Int. Journal of Robotics Research
ICAA: Int. Conf. on Assembly Automation	IMG: Intelligent Manipulation and Grasping
ICAR: Int. Conf. on Advanced Robotics	IROS: IEEE Int. Conf. on Intelligent Robots and Systems (5)
ICRA: IEEE Int. Conf. on Robotics and Automation (30)	ISER: Int. Symp. on Experimental Robotics (3)
IFTOMM: Int. Federation for the Promotion of Machines and Mechanisms Science (www.iftomm.org)	ISRAM: Int. Symp. on Robotics and Manufacturing
IDMME: Integrated Design and Manufacturing in Mechanical Engineering	ISRR: Int. Symp. on Robotics Research
	MEGA: Effective Methods in Algebraic Geometry

RoManSy: Int. Conf. on Robotics and Manipulator Systems (7) **EUCOMES:** European Conf. on Mechanism Science (5)
RSS: Robotics: Science and Systems (1)

Résumé

Journaux	Conférences Internationales avec comité de lecture	Conférences Nationales avec comité de lecture	Conférences invitées	Rapports de Recherche
42	148	11	18	17