

## PUBLICATION LIST OF ALEXANDRE SEURET

### Summary of the publications

- 27(+1) publications in international (national) journals ;
- 62(+6) publications in international (national) conferences ;
- 11 chapters in collective books and editor of 2 collective books.
- 3 projects deliverables.
- 1 Patent

### Publications List

#### (1) Articles published in Journals

- International Journals :*
- 1.1 E. Fridman, **A. Seuret** and J.-P. Richard, “Robust Sampled-Data Stabilization of Linear Systems : An Input Delay Approach”, **Automatica**, Vol. 40(8), pp. 1441-1446, Aug. 2004 ;
  - 1.2 J. Anthonis, **A. Seuret**, J.P. Richard and H. Ramon, “Design of a pressure control system with dead band and time delay”, **IEEE Trans. Control Syst. Technology**, Vol. 15(6), pp. 1103-1111, 2007 ;
  - 1.3 **A. Seuret**, C. Edwards, S.K. Spurgeon and E. Fridman, “Static output feedback sliding mode control design via an artificial stabilizing delay”, **IEEE Trans on Aut. Control**, Vol. 54(2), pp. 256-265, 2009 ;
  - 1.4 J.M. Gomes Da Silva, **A. Seuret**, J.-P. Richard and E. Fridman “Stabilization of Neutral Systems with Saturating Control Inputs”, in **International Journal of Systems Science**, Vol. 42 (7), pp. 1093-1103, 2011.
  - 1.5 **A. Seuret**, “A novel stability analysis of linear systems under asynchronous samplings”, in **Automatica**, Vol. 48(1), pp. 177-182, 2012.
  - 1.6 C. Briat and **A. Seuret**, “Convex dwell-time characterizations for uncertain linear impulsive systems”, in **IEEE Trans. on Automatic Control**, Vol. 57(12), pp. 3241-3246, 2012.
  - 1.7 C. Briat and **A. Seuret**, “A looped-functional approach for robust stability analysis of linear impulsive systems”, in **Systems & Control Letters**, Vol. 61(10), pp. 980-988, 2012.
  - 1.8 **A. Seuret** and J.M. Gomes Da Silva, “Taking into account period variations and actuators saturation in sampled-data systems”, in **Systems & Control Letters**, Vol. 61(12), pp. 1286-1293, 2012.
  - 1.9 W. Jiang and **A. Seuret**, “Stability Analysis for Sampled-Data Systems with Input Delay”, in **Advanced Science Letters**, Vol.11(1), pp. 456-461, 2012.
  - 1.10 **A. Seuret** and M.M. Peet, “Stability analysis of sampled-data systems using Sum of Squares”, in **IEEE Trans. on Automatic Control** Vol. 58(6), pp. 1620-1625, 2013.
  - 1.11 C. Briat and **A. Seuret**, “Affine characterizations of minimal and mode-dependent dwell-times for uncertain linear switched systems”, in **IEEE Transactions on Automatic Control**, Vol. 58(5), pp. 1304-1310, 2013.
  - 1.12 **A. Seuret** and F. Gouaisbaut, “Wirtinger-based integral inequality : application to time-delay systems”, **Automatica**, Vol. 49(9), pp. 2860-2866, 2013.
  - 1.13 **A. Seuret**, C. Prieur and N. Marchand “Stability of nonlinear systems by means of event-triggered sampling algorithms”, **IMA Journal of Mathematical Control and Information**, published June 12 2013.
  - 1.14 L. Brinon Arranz, **A. Seuret** and C. Canudas de Wit, “Cooperative Control Design for Time-varying Formations of Multi-Agent Systems”, **IEEE Trans on Automatic Control**, Vol 59(8), pp. 2283-2288, 2014.
  - 1.15 C. Briat and **A. Seuret**, “On the necessity of looped-functionals arising in the analysis of pseudo-periodic, sampled-data and hybrid systems”, in **International Journal of Control**, Vol. 88(12), pp. 2563-2569, 2015.
  - 1.16 **A. Seuret**, F. Gouaisbaut and E. Fridman “Stability of discrete-time systems with time-varying delays via a novel summation inequality”, **IEEE Trans. on Automatic Control**, vol. 60(10), 2740-2745, 2015.

- 1.17** A. Seuret and C. Briat, “*Stability analysis of uncertain sampled-data systems with incremental delay using looped-functionals*”, in **Automatica**, vol. 55(5), 274-278, 2015.
- 1.18** A. Seuret and F. Gouaisbaut, “*Hierarchy of LMI conditions for the stability analysis of time-delay systems*”, in **Systems & Control Letters**, vol 81, (7), 1-7, 2015.
- 1.19** A. Seuret, F. Gouaisbaut and Y. Ariba, “*Complete Quadratic Lyapunov functionals for distributed delay systems*”, **Automatica**, vol 62(12), 168-176, 2015.
- 1.20** J.-F. Trégouët, A. Seuret and M. Di Loreto, “*A periodic approach for input-delay problems : application to network controlled systems affected by polytopic uncertainties*”, in **International Journal of Robust and Nonlinear Control**, vol. 26((3)), 385-400, 2016.
- 1.21** J.M. Gomes Da Silva Jr., I. Queinnec, A. Seuret and S. Tarbouriech, “*Regional stability analysis of discrete-time dynamic output feedback under aperiodic sampling and input saturation*”, accepted in **IEEE Trans. on Automatic Control**, 2016.
- 1.22** C. Albea Sanchez, A. Seuret, L. Zaccarian, “*Activation and consensus control of a three-node network cluster via hybrid approach*”, accepted in **Nonlinear Analysis : Hybrid Systems**, Vol. 22, pp. 16-30, 2016.
- 1.23** L. Brinon Arranz, L. Schenato and A. Seuret, “*Distributed Source-seeking via a Circular Formation of Agents under Communication Constraints*”, to appear in **IEEE Trans. on Control of Networked Systems**, vol 3(2), 104-115, 2016.
- 1.24** A. Seuret, C. Prieur, S. Tarbouriech and L. Zaccarian, “*LQ-based event-triggered co-design for saturated linear systems*”, to appear in **Automatica**, 2016.
- 1.25** L. Hetel, C. Fiter, H. Omran, A. Seuret, E. Fridman, J.P. Richard and S.I. Niculescu, “*Recent developments on the stability of systems with aperiodic sampling : an overview*”, accepted as a survey paper in **Automatica**, 2016.
- 1.26** M.-J. Park, O.-M. Kwon, and A. Seuret, “*Weighted consensus protocols design based on network centrality for multi-agent systems with sampled-data*”, to appear in **IEEE Trans. on Automatic Control**, 2016.
- 1.27** S. Tarbouriech, A. Seuret, J.M. Gomes Da Silva and D. Sbarbaro, “*Observer-based event-triggered control co-design for linear systems*”, to appear in **IET Control Theory & Applications**, 2016.

#### *National Journals (French)*

- 1f.1** A. Seuret, T. Floquet et J.-P. Richard, “*Observateurs pour systèmes à retard variable et inconnu*”, e-STA, Sciences et Technologies de l’Automatique, revue électronique du GdR MACS, <http://www.e-sta.see.asso.fr/accueil.php>, article invité (sélectionné de CIFA2006), Vol. 3, No 3, SEE Edt., 2006.

## (2) Conference articles :

### *In international conferences :*

- 2.1** A. Seuret, M. Dambrine and J.-P. Richard, “*Robust exponential stabilization for systems with time-varying delays*”, **TDS’04, 5th IFAC Workshop on Time Delay Systems**, Leuven, Belgium, September 2004;
- 2.2** E. Fridman, A. Seuret and J.P. Richard, “*Robust sampled-data control of linear systems : An input delay approach*”, **TDS’04, 5th IFAC Workshop on Time Delay Systems**, Leuven, Belgium, September 2004;
- 2.3** A. Seuret, E. Fridman, J.-P. Richard, “*Application of a variable-delay model to the sampled-data stabilization*”, **NSF-CNRS Workshop ”Advances in Time-delay Systems”**, Nantes, 13-15 Sept., 2004. <http://www.irccyn.ec-nantes.fr/CNRSNSF/>
- 2.4** J.-M. Gomez Da Silva, E. Fridman, A. Seuret and J.-P. Richard, “*Stabilization of neutral systems with saturating inputs*”, **IFAC World Congress 2005**, reg. paper 4091, session 193, Prague, Czech Republic, July 2005 ;
- 2.5** J. Anthonis, W. Franssens, A. Seuret, J.-P. Richard and H. Ramon, “*Two control laws for a spray system with time varying delay and dead band*”, **IFAC World Congress 2005**, reg. paper 4365, session 389, Prague, Czech Republic, July 2005 ;

- 2.6** A. Seuret, E. Fridman and J.-P. Richard, “*Sampled-data exponential stabilization of neutral systems with input and state delays*”, **IEEE MED 2005**, Mediterranean Conference, Cyprus, July 2005 ;
- 2.7** A. Seuret, F. Michaut, J.-P. Richard and Th. Divoux, “*GPS-synchronized networked control for communication delay compensation*”, **European Workshop NECST 2005**, Networked Control Systems Tolerant to faults, Ajaccio, Corsica, France, 6-7 October 2005, FP6 <http://www.strep-necst.org/> ;
- 2.8** A. Seuret, J.-P. Richard and Th. Divoux, ‘*Networked control using GPS synchronization*”, **ACC’06**, **IEEE American Control Conference**, invited session Advances in Networked Controlled Systems, Minneapolis, Minnesota, USA, June 14-16 2006.
- 2.9** A. Chamroo, A. Seuret, C. Vasseur, J.P. RICHARD and H.P. WANG, “*Observing and controlling plants using their delayed and sampled outputs*”, **CESA’06**, 4th IEEE conf. on Computational Engineering in Systems Applications, Beijing, China, 4-6 October 2006. SÃ©lectionnÃ© pour parution dans la revue IJCCC, Int. J. Computers, Communications & Control, 2006 <http://www.journal.univagora.ro> ;
- 2.10** A. Seuret, M. Termens-Ballester, A. Toguyeni, S. El Khattabi and J.P. Richard, “*Implementation of an internet-controlled system under variable delays*”, **ETFA’06**, 11th IEEE int. conf. on Emerging Technologies & Factory Automation, Inv. Track NeCST (Networked Control Systems Tolerant to Faults), Prague, Czech Republic, 20-22 September 2006 ;
- 2.11** A. Seuret, T. Floquet and J.-P. Richard, “*A sliding mode observer for linear systems with unknown time varying delay*”, **ACC’07**, **IEEE American Control Conference**, New York, US, 2007 ;
- 2.12** A. Seuret, T. Floquet and J.-P. Richard, “*Observer design for systems with non small and unknown time-varying delay*”, **TDS’07**, 7th Workshop on Time Delay Systems, Nantes, France, September 2007 ;
- 2.13** A. Seuret, C. Edwards and S.K. Spurgeon, “*Robust static output feedback sliding mode control design via an artificial stabilizing delay*”, **CDC’07**, 46th IEEE Conference on Decision Control, New Orleans, LA, USA, December 2007 ;
- 2.14** A. Seuret, C. Edwards and S.K. Spurgeon, “*Static output feedback sliding mode control design via an artificial stabilizing delay*”, **IFAC World Congress**, Seoul, Korea, 2008 ;
- 2.15** A. Seuret and J.-P. Richard, “*Control of a remote system over network including delays and packet dropout*”, **IFAC World Congress** in the Invited Session on ”Interconnected Systems”, Seoul, Korea, 2008 ;
- 2.16** A. Seuret, “*Networked control under synchronization errors*”, in **ACC’08**, **IEEE American Control Conference**, Seattle, Washington, 2008.
- 2.17** A. Seuret, D.V. Dimarogonas, K.H. Johansson , “*Consensus under communication delays*”, in **47th IEEE Conference on Decision and Control, CDC 2008**, Cancun, Mexico, 2008.
- 2.18** A. Seuret, “*Lyapunov-Krasovskii Functionals Parameterized with Polynomials*”, in **Proceedings of the 6th IFAC Symposium on Robust Control Design, ROCOND’09**, Haifa, Israël, 2008.
- 2.19** A. Seuret and K.H. Johansson, “*Stabilization of time-delay systems through linear differential equations using a descriptor representation*”, in **ECC’09**, **European Control Conference**, Budapest, Hungary, 2009.
- 2.20** A. Seuret and K.H. Johansson “*Networked control under time-synchronization errors*”, in **8<sup>th</sup> IFAC Workshop on Time Delay systems**, Sinaia, Romania, 2009.
- 2.21** A. Seuret, D.V. Dimarogonas and K.H. Johansson, “*Consensus of double integrator multi-agents under communication delay*”, in **8<sup>th</sup> IFAC Workshop on Time Delay systems**, Sinaia, Romania, 2009.
- 2.22** L. Briñon Arranz, A. Seuret and C. Canudas de Wit, “*Translation Control of a Fleet Circular Formation of AUVs under Finite Communication Range*”, in **Proceedings of the 48<sup>th</sup> IEEE Conference on Decision and Control, CDC’09**, Shanghai, China, 2009.
- 2.23** A. Seuret, “*Stability analysis for sampled-data systems with a time-varying period*”, in **Proceedings of the 48<sup>th</sup> IEEE Conference on Decision and Control, CDC’10**, Shanghai, China, 2010.
- 2.24** A. Seuret, “*Exponential stability and stabilization of sampled-data systems with time-varying period*”, in **TDS’10**, 9<sup>th</sup> IFAC Workshop on Time Delay Systems, Prague, Czech Republic, 2010.
- 2.25** L. Briñon Arranz, A. Seuret and C. Canudas de Wit, “*Contraction Control of a Fleet Circular Formation of AUVs under Finite Communication Range*”, accepted in **ACC’10**, **IEEE American Control Conference**, Baltimore, USA, 2010.

- 2.26** W. Jiang and **A. Seuret**, “*Improved stability analysis of networked control systems under asynchronous sampling and input delay*”, in **Necsys’10, IFAC Workshop on control and Estimation of Networked Control Systems**, Annecy, France, 2010.
- 2.27** G. Rodrigues de Campos and **A. Seuret**, “*Continuous-time double integrator consensus algorithms improved by an appropriate sampling*”, in **Necsys’10, IFAC Workshop on control and Estimation of Networked Control Systems**, Annecy, France, 2010.
- 2.28** L. Briñon Arranz, **A. Seuret** and C. Canudas de Wit, “*General Framework using Affine Transformations to Formation Control Design*”, in **Necsys’10, IFAC Workshop on control and Estimation of Networked Control Systems**, Annecy, France, 2010.
- 2.29** L. Briñon Arranz, **A. Seuret** and C. Canudas de Wit, “*Elastic Formation Control Based on Affine Transformations*”, to be presented in **IEEE ACC’11, American Control Conference**, San Francisco, California , USA, 2011.
- 2.30** **A. Seuret**, “*Stability analysis of networked control systems with asynchronous sampling and input delay*”, to be presented in **IEEE ACC’11, American Control Conference**, San Francisco, California , USA, 2011.
- 2.31** C. Briat and **A. Seuret**, “*Stability Criteria for Asynchronous Sampled-data Systems - A Fragmentation Approach*”, to be presented in **IFAC World Congress**, Milan, Italy, 2011.
- 2.32** **A. Seuret** and J.M. Gomes Da Silva Jr., “*Networked control : taking into account sample period variations and actuators saturation*”, to be presented in **IFAC World Congress**, Milan, Italy, 2011.
- 2.33** J. Vieira Flores, J.M. Gomes Da Silva Jr. and **A. Seuret**, “*Static anti-windup synthesis for linear systems with time-varying input delays* ”, to be presented in **IFAC World Congress**, Milan, Italy, 2011.
- 2.34** **A. Seuret** and M.M. Peet, “*Sum of squares for stability of sampled-data systems*”, to be presented in **IFAC World Congress**, Milan, Italy, 2011.
- 2.35** **A. Seuret** and C. Prieur, “*Event-triggered sampling algorithms based on a Lyapunov function*”, in **Proceedings of the 50<sup>th</sup> IEEE Conference on Decision and Control, CDC’11**, Orlando, USA, 2011.
- 2.36** P.J. Andrianiaina, **A. Seuret** and D. Simon, “*Robust control under weakened real-time constraints*”, in **Proceedings of the 50<sup>th</sup> IEEE Conference on Decision and Control, CDC’11**, Orlando, USA, 2011.
- 2.37** L. Briñon Arranz, **A. Seuret** and C. Canudas de Wit, “*Collaborative Estimation of Gradient Direction by a Formation of AUVs under Communication Constraints*”, in **Proceedings of the 50<sup>th</sup> IEEE Conference on Decision and Control, CDC’11**, Orlando, USA, 2011.
- 2.38** G. Rodrigues de Campos and **A. Seuret**, “*Improved Consensus Algorithms using Memory Effects*”, in **Proceedings of the 49<sup>th</sup> IEEE Conference on Decision and Control, CDC’11**, Orlando, USA, 2011.
- 2.39** M.B. Saldívar, **A. Seuret** and S. MondiÃ© and F. Gouaisbaut, “*Exponential Stabilization of a Class of Nonlinear Neutral Type Time-Delay Systems, an Oilwell Drilling Model Example*”, in the **10<sup>th</sup> 8th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE 2011)**, MÃ©rida City, Yucatan, Mexico, 2011.
- 2.40** C. Briat and **A. Seuret**, “*Robust stability of impulsive systems : A functional-based approach*”, in the **4<sup>th</sup> IFAC Workshop on Analysis and Design of Hybrid Systems, ADHS’12**, Eindhoven, NL, 2012.
- 2.41** **A. Seuret** and F. Gouaisbaut, “*On the Use of the Wirtinger Inequalities for Time-Delay Systems*”, in the **10<sup>th</sup> IFAC Workshop on Time Delay Systems, TDS’12**, Boston, USA, 2012.
- 2.42** G. Rodrigues de Campos, L. Briñon Arranz, **A. Seuret** and S.I. Niculescu, “*On the Consensus of Heterogeneous Multi-Agent Systems : a Decoupling Approach*”, in the **3<sup>rd</sup> Workshop on control and estimation of Networked Systems**, Santa-Barbara, USA, 2012.
- 2.43** D. Simon, **A. Seuret** and O. Sename, “*On real-time feedback control systems : requirements, achievements and perspectives*”, in the **1<sup>st</sup> International Conference on Systems and Computer Science, ICSCS’12**, Lille, France, 2012.
- 2.44** F. Gouaisbaut, Y. Ariba and **A. Seuret**, “*Bessel inequality for robust stability analysis of time-delay system*”, in the **Proceedings of the 51<sup>th</sup> IEEE Conference on Decision and Control, CDC’13**, Florenz, Italy, 2013.
- 2.45** **A. Seuret**, F. Gouaisbaut and E. Fridman, “*Stability of systems with fast-varying delay using improved Wirtingers inequality*”, in the **Proceedings of the 51<sup>th</sup> IEEE Conference on Decision and Control, CDC’13**, Florenz, Italy, 2013.

- 2.46** A. Seuret, P. Menon and C. Edwards, “*LQR performance for multi-agent systems : Benefits of introducing delayed inter-agents measurements*”, in the **Proceedings of the 51<sup>th</sup> IEEE Conference on Decision and Control, CDC’13**, Florenz, Italy, 2013.
- 2.47** A. Seuret and F. Gouaisbaut, “*Jensen’s and Wirtinger’s inequalities for time-delay systems*”, in the **11<sup>th</sup> IFAC Workshop on Time Delay Systems, TDS’13**, Grenoble, France, 2013.
- 2.48** A. Seuret and F. Gouaisbaut, “*Integral inequality for time-varying delay systems*”, in the **Proceedings of the IEEE European Control Conference, ECC’13**, Zurich, Switzerland, 2013.
- 2.49** L. Briñon Arranz, and A. Seuret, “*Cooperative Translation Control based on Consensus with Reference Velocity : a Source-seeking Application with a Fleet of AUVs*”, in the **Proceedings of the IEEE European Control Conference, ECC’13**, Zurich, Switzerland, 2013.
- 2.50** A. Seuret, C. Prieur, S. Tarbouriech and L. Zaccarian, “*Event-triggered control with LQ optimality guarantees for saturated linear systems*”, in the **Proceedings of the IFAC Workshop on Nonlinear Control, Nolcos’13**, Toulouse, France, 2013.
- 2.51** A. Seuret, F. Gouaisbaut, “*Jensen’s and Wirtinger’s inequalities for time-delay systems*”, in the **Proceedings of the IFAC Workshop on Time-delay Systems, TDS’13**, Grenoble, France, 2013.
- 2.52** A. Seuret and F. Gouaisbaut, “*Complete Quadratic Lyapunov functionals using Bessel-Legendre inequality*”, in the **Proceedings of the IEEE European Control Conference, ECC’14**, Strasbourg, France 2014.
- 2.53** P. Menon, A. Seuret and C. Edwards, “*Consensus Control Laws with Guaranteed Performance in Presence of Fixed Delays*”, in the **Proceedings of the IEEE European Control Conference, ECC’14**, Strasbourg, France 2014.
- 2.54** C. Albea, A. Seuret and L. Zaccarian, “*Hybrid control of a three-agent network cluster*”, in the **Proceedings of the IEEE Conference on Decision and Control, CDC’14**, San Francisco, USA, 2014.
- 2.55** A. Seuret, C. Briat and F. Gouaisbaut, “*Stability analysis of asynchronous sampled-data systems with discrete-time constant input delay*”, in the **Proceedings of the IEEE Conference on Decision and Control, CDC’14**, San Francisco, USA, 2014.
- 2.56** S. Aoues, W. Lombardy, D. Eberard and A. Seuret, “*Robust stability for delayed port-Hamiltonian systems using improved Wirtinger-based inequality*”, in the **Proceedings of the IEEE Conference on Decision and Control, CDC’14**, San Francisco, USA, 2014.
- 2.57** J.M. Gomes Da Silva Jr., I. Queinnec, A. Seuret and S. Tarbouriech, “*Stability Analysis of Dynamic Output Controllers under Aperiodic Sampling and Input Saturation*”, in the **Proceedings of the 21st International Symposium on Mathematical Theory of Networks and Systems (MTNS 2014)**, Groningen, The Netherlands, 2014.
- 2.58** F. Gouaisbaut, Y. Aribal and A. Seuret, “*Stability of distributed delay systems via a robust approach*”, in the **Proceedings of the European Control Conference (ECC 2015)**, Linz, Austria, 2015.
- 2.59** M.A. Davó, F. Gouaisbaut, A. Baños, S. Tarbouriech and A. Seuret, “*Stability of time-delay reset control systems with time-dependent resetting law*”, in the **Proceedings of the IFAC Workshop on Analysis and Design of Hybrid Systems (ADHS 2015)**, Atlanta, USA, 2015.
- 2.60** L. Baudouin, A. Seuret and M. Safi, “*Stability analysis of a system coupled to a transport equation using integral inequalities*”, in **IFAC Workshop on Control of Systems Governed by Partial Differential Equations (CPDE’2016)**, Bertinoro, Italy, 2016.
- 2.61** A. Seuret, F. Gouaisbaut and K. Liu, “*Discretized Jensen’s inequality : an alternative vision of the reciprocally convex combination lemma*”, in **IFAC Workshop on Time Delay Systems (TDS’2016)**, Istanbul, Turkey, 2016.
- 2.62** A. Seuret, C. Prieur, S. Tarbouriech and L. Zaccarian, “*Event-triggered control via reset control systems framework*”, in **IFAC Workshop on Nonlinear Control, Nolcos’16**, Monterrey, Mexico, 2016.

*In national conferences (French speaking) :*

- 2f.1** J. Anthonis, A. Seuret, J.-P. Richard and H. Ramon, “*Réglage d’un processus de pulvérisation caractérisé par une zone morte et un retard*”, **CIFA2004, 3e Conf. Inter. Francophone d’Automatique**, Douz, Tunisie, Novembre 2004;
- 2f.2** A. Seuret, T. Floquet and J.-P. Richard, “*Synthèse d’observateurs pour systèmes à retard inconnu*”, **JN MACS**, Lyon, France, Septembre 2005;

- 2f.3** A. Seuret, T. Floquet and J.-P. Richard, “*Observateurs pour systèmes à retard variable et inconnu*”, **CIFA’O6, 4e IEEE Conf. Internat. Francophone d’Automatique**, ”Prix de la meilleure communication doctorant”, Bordeaux, France, mai-juin, 2006.
- 2f.4** A. Seuret, K.H. Johansson and M. Dambrine. “*Commande de systèmes non retardés par retour de sortie statique échantillonné*”, **CIFA’O8, 5e IEEE Conf. Internat. Francophone d’Automatique**, Bucharest, Romania, September, 2008.
- 2f.5** C. Briat and A. Seuret, “*Sur la stabilité des systèmes linéaires impulsifs par fonctionnelles de Lyapunov*”, **7e Conf. Internat. Francophone d’Automatique**, CIFA 2012, Grenoble, France.
- 2f.6** P.J. Andrianiaina, A. Seuret and Daniel Simon, “*Commande robuste avec Relâchement des contraintes temps-réel (I)*”, **7e Conf. Inter. Francophone d’Automatique**, CIFA2012, Grenoble, France.

### (3) Books :

- 3.1** A. Seuret, H. Özbay, C. Bonnet and H. Mounier. “*Low Complexity Controllers for Time-Delay Systems*”, Springer Verlag, April 2014.
- 3.2** A. Seuret, L. Hetel, J. Daafouz and K.H. Johansson. “*Delays and Networked Control Systems*”, to appear Springer Verlag, 2016.

### (4) Chapters in collective books :

- 4.1** A. Seuret, F. Michaut, J.-P. Richard et F. Lepage. “*Prise en compte des retards de réseau dans la conception de commande*”, in **Systèmes commandés en réseau**, J.-P. Richard & Th. Divoux, Hermès Traités IC2, Information, Commande, Communication, 2007 ;
- 4.2** A. Seuret, E. Fridman and J.-P. Richard. “*Robust Sampled-Data Control - An input delay approach*”, in **Applications of Time-delay Systems**, Edt. J. Chiasson & J.-J. Loiseau, LNCIS 352, pp. 315-327, Springer Verlag, Berlin Heidelberg, 2007.
- 4.3** A. Seuret, T. Floquet, J.-P. Richard and S.K. Spurgeon. “*Observer design for systems with non small and unknown time-varying delay*”, **Topics in Time-Delay Systems : Analysis, Algorithms and Control**, Springer Verlag Lecture Notes in Control and Information Sciences, 2009.
- 4.4** M. Ben Gaïd, D. Robert, O. Sename, A. Seuret, D. Simon. “*Computing aware control*”, **Computing aware control**, in Co-design approaches for dependable networked control systems, ISTE Wiley (Ed.), 2010.
- 4.5** A. Seuret and K.H. Johansson. “*Networked control under time-synchronization errors*”, **Time Delay Systems : Methods, Applications and New Trends**, by Sipahi, R. ; Vyhlídal, T. ; Niculescu, S.-I. ; Pepe, P. in **Lecture Notes in Control and Information Sciences**, Springer Verlag, vol. 423, pp. 369-383, 2012.
- 4.6** M.M. Peet and A. Seuret. “*Global Stability Analysis of Nonlinear Sampled-Data Systems using Convex Methods*”, in **Time Delay Systems : Advances in Delays and Dynamics**, by Vyhlídal, T. ; J.-F Lafay, J.-F ; Sipahi, R. ; Niculescu, S.-I. Springer Verlag, pp. 215-227, 2014.
- 4.7** A. Seuret and F. Gouaisbaut. “*New Integral Inequality and Its Application to Time-Delay Systems*”, in **Time Delay Systems : Advances in Delays and Dynamics**, by Vyhlídal, T. ; J.-F Lafay, J.-F ; Sipahi, R. ; Niculescu, S.-I., Springer Verlag, pp. 31-44, 2014.
- 4.8** A. Seuret and F. Gouaisbaut. “*Integral Inequality for Time-Varying Delay Systems and its Application to Output-Feedback Control*”, in **Low Complexity Controllers for Time-Delay Systems**, by A. Seuret, H. Özbay, C. Bonnet and H. Mounier, Springer Verlag, pp. 155-168, 2014.
- 4.9** B. Saldivar, S. Mondié and A. Seuret. “*Suppressing Stick-slip Oscillations in Oilwell Drillstrings*”, in **Low Complexity Controllers for Time-Delay Systems**, by A. Seuret, H. Özbay, C. Bonnet and H. Mounier, Springer Verlag, pp. 189-203, 2014.
- 4.10** A. Seuret and C. Briat *On the stability analysis of sampled-data systems with delays* in “**Delays and Networked Control Systems**”, submitted to Springer Verlag, by A. Seuret, L. Hetel, J. Daafouz and K.H. Johansson. 2016.
- 4.11** A. Arce Rubio, A. Seuret, Y. Ariba and A. Manisi *Optimal control strategies for load carrying drones in “Delays and Networked Control Systems”*, submitted to Springer Verlag, by A. Seuret, L. Hetel, J. Daafouz and K.H. Johansson. 2014.

**(5) Internal reports and delivrables :**

**5.1** D4d.5.3 - Final report on results on the industrial test case, HyCON.

**5.2** D01.1 - Classification of networked control systems, FeedNetBack.

**5.3** D04.03 - Design of robust variable rate controllers, FeedNetBack.

**(6) Patents :**

**6.1** P. Andrianaina, A. Seuret and D Simon, Robust system control method with short execution deadlines  
US Patent 9,164,796.