

Liste de publications - Vincent Cocquempot

mise à jour 07/12/2022

2023

Articles in International journals (1)

- Mohamed Amine Atoui, Vincent Cocquempot. Explainable root cause and pathway analysis with robust and adaptive statistics. *Computers in Industry*, 2023, 144, pp.103770. [⟨10.1016/j.compind.2022.103770⟩](https://doi.org/10.1016/j.compind.2022.103770).

2022

Articles in International Conferences (2)

- Abdelkarim Abdelkarim, Virginie Degardin, Vincent Cocquempot. Sensitivity analysis of residuals for soft fault monitoring in Y-shaped networks. *The 6th International Conference on Control, Automation and Diagnosis (ICCAD'22)*, Jul 2022, Lisbon, Portugal.
- Abdelkarim Abdelkarim, Virginie Degardin, Mohamed Amine Atoui, Vincent Cocquempot. Using Power Line Communication for Fault Detection and Localization in Star-shaped Network. *11th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes - SAFEPROCESS*, Jun 2022, Pafos, Cyprus. pp.526-532, [⟨10.1016/j.ifacol.2022.07.182⟩](https://doi.org/10.1016/j.ifacol.2022.07.182).

2021

Articles in International journals (2)

- Mohamed Amine Atoui, Achraf Cohen, Vincent Cocquempot. Unlocked decision making based on causal connections strength. *European Journal of Control*, 2021, [⟨10.1016/j.ejcon.2021.06.014⟩](https://doi.org/10.1016/j.ejcon.2021.06.014).
- Yajie Ma, Bin Jiang, Vincent Cocquempot. Modeling and Adaptive Fault Compensation for Two Physically Linked 2WD Mobile Robots. *IEEE/ASME Transactions on Mechatronics*, 2021, 26 (2), pp.1161-1171. [⟨10.1109/TMECH.2021.3052900⟩](https://doi.org/10.1109/TMECH.2021.3052900).

Articles in International Conferences (7)

- Abdelkarim Abdelkarim, Mohamed Amine Atoui, Virginie Degardin, Vincent Cocquempot. Fault Detection and Localization in Vehicular Embedded Network Using Power Line Communication. *International Conference on Systems and Control (ICSC21)*, Nov 2021, Caen, France. [⟨10.1109/ICSC50472.2021.9666522⟩](https://doi.org/10.1109/ICSC50472.2021.9666522).

- Abdelkarim Abdelkarim, Mohamed Amine Atoui, Virginie Degardin, Vincent Cocquempot. Fault detection and localization in Y-shaped network through power line communication. 5th International Conference on Control and Fault-Tolerant Systems, Sep 2021, Saint-Raphaël, France.
- Mohamed Amine Atoui, Achraf Cohen, Vincent Cocquempot. Unlocked decision making based on causal connections strength. European Control Conference 2021, Jun 2021, Online, Netherlands.
- Mohamed Amine Atoui, Vincent Cocquempot. New Decision rules for Fisher discriminant analysis : applied to fault diagnosis. European Control Conference 2021, Jun 2021, Online, Netherlands.
- Mohamed Amine Atoui, Vincent Cocquempot. Open set diagnosis: high-dimensional clustering. IEEE MED 2021 : 29th Mediterranean Conference on Control and Automation, Jun 2021, Bari, Puglia,, Italy.
- Mohamed Amine Atoui, Vincent Cocquempot. A causal mixture model decomposition for root cause identification. 17th IFAC Symposium on Information Control Problems in Manufacturing, Jun 2021, Online, Hungary.
- Abdelkarim Abdelkarim, Virginie Degardin, Vincent Cocquempot, Mohamed Amine Atoui. Soft fault detection and localization in an unshielded twisted pair network using power line communication. 7th International Conference on Vehicle Technology and Intelligent Transport Systems (VEHITS), Apr 2021, Online, Portugal. pp.104380.

2020

Articles in International journals (1)

- Yongyuan Xu, Yang Hao, Bin Jiang, Vincent Cocquempot. Backstepping-based sliding mode fault-tolerant control for linear interconnected parabolic distributed parameter systems. IET Control Theory and Applications, 2020, 14 (14), pp.1928 - 1936. (hal-02941488)

2019

Articles in International journals (3)

- H. YANG, H. LI, B. JIANG, V. COCQUEMPOT. Fault tolerant control of switched systems: a generalized separation principle. IEEE Transactions on Control Systems Technology. Vol 27, issue 2, pp 563-565, march 2019. IF JCR 3.882.
- D. DU, V. COCQUEMPOT, B. JIANG, Robust fault estimation observer design for switched systems with unknown input, Applied Mathematics and Computation, Elsevier, Vol. 348, pp 70-83, May 2019. IF JCR 2.300.

- B ABCI, M. El B. El NAJJAR, V COCQUEMPOT, G. DHERBOMEZ. An informational approach for sensor and actuator fault diagnosis for autonomous mobile robots, *Journal of Intelligent & Robotic Systems*, pp 1-20 , Oct 2019, IF JCR 2.02.

Articles in International Conferences 2019 (3)

- B ABCI, M. El B. El NAJJAR, V COCQUEMPOT, G. DHERBOMEZ. Sensor fault tolerant sliding mode control using information filters with application to a two-wheeled mobile robot, 6th International Conference on Control, Decision and Information Technologies (IEEE CODIT'19) , Paris, France April 23-26, 2019.
- B ABCI, M. El B. El NAJJAR, V COCQUEMPOT, Sensor and Actuator Fault Diagnosis for a Multi-Robot System Based on the Kullback-Leibler Divergence. 4th International Conference on Control and Fault-Tolerant Systems (SYSTOL). September 18-20th, 2019 - Casablanca, Morocco.
- B ABCI, M. El B. El NAJJAR, V COCQUEMPOT, G. DHERBOMEZ. Sensor Fault Tolerant Sliding Mode Control Using Information Filters with Application to a Two-Wheeled Mobile Robot. 6th International Conference on Control, Decision and Information Technologies (CoDIT), Paris, France on April 23-26, 2019.

2018

Articles in International journals (4)

- Y. MA, V. COCQUEMPOT, M. EL BADAOU EL NAJJAR, B. JIANG, Actuator Failure Compensation for Two Linked 2WD Mobile Robots Based on Multiple-Model Control, *International Journal of Applied Mathematics and Computer Science (AMCS)*, vol 27, n°4, 2018. IF JCR 1.420.
- D. DU, S. XU, V. COCQUEMPOT, Fault detection for nonlinear discrete-time switched systems with persistent dwell-time. *IEEE Transactions on Fuzzy Systems*. Vo. 26, Issue 4, pp 2466-2474, DOI 10.1109/TFUZZ.2017.2753164. August 2018. IF JCR 7.671.
- D. DU, S. XU, V. COCQUEMPOT,, Finite-frequency fault detection filter design for discrete-time switched systems, *IEEE ACCESS*, Vol. 6, Issue 1, pp 70487-70496, December 2018. IF JCR 3.55
- Y. MA, V. COCQUEMPOT, M. EL BADAOU EL NAJJAR, B. JIANG. Adaptive Compensation of Multiple Actuator Faults for Two Physically Linked 2WD Robots. *IEEE Transactions on Robotics (T-RO)*. 34 (1), 248-255. Feb. 2018. IF JCR 4.036.

Articles in International Conferences 2018 (5)

- X. WANG, B. JIANG, N. LU, V. COCQUEMPOT. Accurate Prediction of RUL under Uncertainty Conditions: Application to the Traction System of a High-speed Train. 10th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes. Warsaw, Poland, August 29-31, 2018.

- D. ZHAO, B. JIANG, H. YANG, G. TAO, V. COCQUEMPOT, Y. MA. Fault-tolerant control of flexible air-breathing hypersonic vehicles via static output feedback. 10th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes. Warsaw, Poland, August 29-31, 2018.
- D. DU, V. COCQUEMPOT. Non-fragile actuator fault estimation and accommodation for switched systems. 10th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes. Warsaw, Poland, August 29-31, 2018.
- D. A. PEREIRA, A. AL-DUJAILI, M. EL BADAOUI EL NAJJAR, V. COCQUEMPOT, Y. MA. Actuator fault estimation and fault tolerant control in three physically-linked 2WD mobile robots. 10th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes. Warsaw, Poland, August 29-31, 2018.
- B ABCI, J AL HAGE, M. EI B. EI NAJJAR, V COCQUEMPOT. Multi-Robot Autonomous Navigation System Using Informational Fault Tolerant Multi-Sensor Fusion with Robust Closed Loop Sliding Mode Control. 21st IEEE International Conference on Information Fusion (FUSION), University of Cambridge, 10-13 July 2018.

Book 2018 (1)

- K. ZHANG, B. JIANG, P. SHI, V. COCQUEMPOT, Observer-Based Fault Estimation Techniques, Springer Nature, Studies in Systems, Decision and Control. 2018. <http://www.springer.com/us/book/9783319674919>

2017

Articles in International journals (6)

- K. ZHANG, V. COCQUEMPOT, B. JIANG. Adjustable Parameter-based Multi-objective Fault Estimation Observer Design for Continuous-time/Discrete-time Dynamic Systems. International Journal of Control, Automation and Systems, Springer, 15(3) (2017) 1077-1088, IF JCR 1.687.
- Y. S. HAGH, R. M. ASL, V. COCQUEMPOT. A Hybrid Robust Fault Tolerant Control Based on Adaptive Joint Unscented Kalman Filter, ISA Transactions, Vol. 66, Elsevier, pp 262-274, IF JCR 3.394, 31 jan 2017.
- Y. MA, V. COCQUEMPOT, M. EL BADAOU EL NAJJAR, B. JIANG. Multi-Design Integration based Adaptive Actuator Failure Compensation Control for Two Linked 2WD Mobile Robots, IEEE/ASME Transactions on Mechatronics (TMECH), accepted 13 jul 2017. DOI : 10.1109/TMECH.2017.2731523. IF JCR 4.357.
- K. ZHANG, B. JIANG, V. COCQUEMPOT, Distributed Fault Estimation Observer Design for Multi-Agent Systems with Switching Topologies, IET Control Theory & Applications, accepted 3 August 2017, IF JCR 2.536
- D. DU, S. XU, V. COCQUEMPOT, Actuator fault estimation for discrete-time switched systems with finite-frequency. Systems & Control Letters. Elsevier. Vol 108, pp 64–70. 2017. IF JCR 2.550

- Z. ZHANG, H. YANG , B. JIANG, V. COCQUEMPOT, Y. CHENG. Decentralized Fault Tolerant Control of Tethered Spacecraft Formation: An Interconnected System Approach. IET Control Theory & Applications, accepted 30 August 2017, IF JCR 2.536

Articles in International Conferences 2017 (5)

- Y. MA, V. COCQUEMPOT, M. EL BADAOU EL NAJJAR, G. ZHENG, A. POLYAKOV. Fault-Tolerant Control for Physically Linked Two 2WD Mobile Robots with Actuator Faults. IFAC WC, Toulouse, 9-14 july, 2017.
- H. YANG, H. LI, B. JIANG, V. COCQUEMPOT. Separation principle based fault estimation of accommodation for switched systems. IFAC WC, Toulouse, 9-14 july, 2017.
- D. DU, V. COCQUEMPOT. Fault diagnosis and fault tolerant control for discrete-time linear systems with sensor fault. IFAC WC, Toulouse, 9-14 july, 2017.
- A. AI-DUJAILI, Y. MA, M. EL BADAOU EL NAJJAR, V. COCQUEMPOT, Actuator Fault Compensation in Three Linked 2WD Mobile Robots Using Multiple Dynamic Controllers. IFAC WC, Toulouse, 9-14 july, 2017.
- A. AI-DUJAILI, V. COCQUEMPOT, M. EL BADAOU EL NAJJAR, Y. MA. Actuator Fault Compensation Tracking Control for Multi Linked 2WD Mobile Robots. IEEE MED 2017, 25th Mediterranean Conference on Control and Automation Control and Automation, Valletta, Malta, July 3-6, 2017.

Book chapter 2017 (1)

- Y. WANG, J-Ph CASSAR, V. COCQUEMPOT, A-S GUILBERT, Selection of Steady State Time-Periods for Monitoring an Industrial Heat Exchanger, Chapter in *Advanced Solutions in Diagnostics and Fault Tolerant Control*, J.M. Koscielny et al. (eds.), Advances in Intelligent Systems and Computing 635, DOI 978-3-319-64474-5_31, pp 368-379.

2016

Articles in International journals (3)

- K. ZHANG, B. JIANG. V. COCQUEMPOT, Fuzzy unknown input observer-based robust fault estimation design for discrete-time fuzzy systems, Signal Processing, Elsevier, IF JCR 2.209. Accepted 25 March 2016, Available online 26 March 2016
- A. HAKEM, V. COCQUEMPOT, M. K. PEKPE. Switching Time Estimation and Active Mode Recognition using a Data Projection Method. International Journal of Applied Mathematics and Computer Science, vol 26, n°4, pp. 827-840, 1 dec 2016
- K. ZHANG, B. JIANG. V. COCQUEMPOT, Robust Fault Estimation Observer Design with Finite-Time Convergence Specification, IET Control Theory & Application, IF JCR 2.048. Accepted 1st August 2016.

Articles in International Conferences 2016 (3)

- I. J. HERMINE SOM, V. COCQUEMPOT, A. AITOUICHE. Boundary PDE-based Observer for Leakage Detection in Pressurized Pipes. SysTol'16: 3rd International Conference on Control and Fault-Tolerant Systems, Barcelona, 7-9 september 2016.
- Y. MA, V. COCQUEMPOT, M. EL BADAOUI EL NAJJAR, B. JIANG. Multiple-Model Actuator Failure Compensation for Two Linked 2WD Robots. SysTol'16: 3rd International Conference on Control and Fault-Tolerant Systems, Barcelona, 7-9 september 2016.
- Y. MA, A. AL-DUJAILLI, V. COCQUEMPOT, M. EL BADAOUI EL NAJJAR. An adaptive actuator failure compensation scheme for two linked 2WD mobile robots. Advanced Control and Diagnosis, ACD 2016, Lille, 17-18 Nov. 2016. Proceedings available at <http://iopscience.iop.org/issue/1742-6596/783/1>

2015

Articles in International journals (5)

- B. BOULKROUNE, A. AITOUICHE, V. COCQUEMPOT, Li CHENG, P. ZHIJUN. Actuator fault diagnosis with application to a diesel engine testbed. Mathematical Problems in Engineering. Special Issue on Fault Detection, Isolation, Estimation, and Accommodation of Dynamic Systems. Feb 2015.
- K. ZHANG, P. SHI, V. COCQUEMPOT, B. JIANG. Editorial article : Fault Detection, Isolation, Estimation, and Accommodation of Dynamic Systems. Mathematical Problems in Engineering. Special Issue on Fault Detection, Isolation, Estimation, and Accommodation of Dynamic Systems. Feb 2015.
- K. ZHANG, B. JIANG. V. COCQUEMPOT, Adaptive technique-based distributed fault estimation observer design for multi-agent systems with directed graphs. Control Theory & Applications, IET, Volume:9 , Issue: 18, pp. 2619 – 2625, 2015
- I.-H.-S. SOM, V. COCQUEMPOT, A. AITOUICHE, Exponential Boundary Observers for Pressurized Water Pipe., Journal of Physics: Conference Series, vol 659 (1), 2015.
- B. BOULKROUNE, A. AITOUICHE, V. COCQUEMPOT. Observer Design for Nonlinear Parameter-Varying Systems. Application to Diesel Engines. International Journal of Adaptive Control and Signal Processing. Volume 29, Issue 2, pp 143-157, February 2015.

Articles in International Conferences 2015 (5)

- A. HADDAD, A. AITOUICHE, V. COCQUEMPOT. Active Fault Tolerant Decentralized Control Strategy for an Autonomous 2WS4WD Electrical Vehicle Path Tracking. 9th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, Paris 2-4 sept 2015.

- H. YANG, B. JIANG, V. COCQUEMPOT, Decentralized Fault Tolerant Formation Control For a Class of Tethered Spacecraft. 9th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, Paris 2-4 sept 2015.
- R. LESOBRE, K. BOUVARD, C. BERENGUER, V. COCQUEMPOT, A. BARROS. A Design Approach for MFOP-Based Maintenance Policy of Multi-Component Systems. MMR2015 : 9th International Conference on Mathematical Methods in Reliability. Tokyo, Japan, on June 1-4, 2015
- X. ZHANG, V. COCQUEMPOT, A. AITOUICHE. Fault-tolerant Control Scheme based on Reference Adjustments for a 4WD Electric Vehicle with Actuator Faults and Constraints. 23rd IEEE Mediterranean Conference on Control and Automation. Torremolinos, Spain, on June 16th-19th, 2015
- I.-H.-S. SOM, V. COCQUEMPOT, A. AITOUICHE, 'Exponential Boundary Observers for Pressurized Water Pipe.', Advanced Control and Diagnosis, 18-19 November 2015, Pilsen, Czech Republic

2014

Articles in International Journals (6)

- Q. SHEN, B. JIANG, V. COCQUEMPOT, Adaptive fuzzy observer-based active fault-tolerant dynamic surface control for a class of nonlinear systems with actuator faults, IEEE Transactions on Fuzzy Systems. Vol. 22, N° 2, April 2014.
- L. YAO, V. COCQUEMPOT, H. WANG. A fault diagnosis and fault tolerant control scheme for a class of nonlinear singular systems. IET Control Theory & Applications. Ed. The Institution of Engineering and Technology. (accepted sept 2014).
- L. YAO, H. WANG and V. COCQUEMPOT. Adaptive nonlinear actuator fault diagnosis for uncertain nonlinear systems with time-varying delays. Asian Journal of Control. Ed. Wiley. Volume 16, Issue 4, pages 1057–1065, July 2014.
- T. ZOUARI, K. M. PEKPE, V. COCQUEMPOT, M. KSOURI. Active Mode Recognition of Switched Nonlinear Systems: Application to Fault Detection and Isolation. Asian Journal of Control. Ed. Wiley. Volume 16, Issue 2, pages 345–357, March 2014.
- M. GHOLAMI, V. COCQUEMPOT, H. SCHIOELER, T. BAK. Active Fault Tolerant Control of Piecewise Affine Systems with Reference Tracking and Input Constraints. International Journal of Adaptive Control and Signal Processing. Volume 28, Issue 11, pages 1240–1265, November 2014.
- H. YANG, B. JIANG, V. COCQUEMPOT, A survey of results and perspectives on stabilization of switched nonlinear systems with unstable modes. Nonlinear Analysis: Hybrid Systems. Volume 13, August 2014, Pages 45–60,

Book 2014 (1)

- H. YANG, B. JIANG, V. COCQUEMPOT, Stabilization of Switched Nonlinear Systems with Unstable Modes, Springer. Series: [Studies in Systems, Decision and Control](#), Vol. 9. <http://www.springer.com/engineering/control/book/978-3-319-07883->

Articles in International Conferences 2014 (6)

- R. LESOBRE, K. BOUVARD, C. BERENGUER, A. BARROS. V. COCQUEMPOT. A usage-informed preventive maintenance policy to optimize the Maintenance Free Operating Period for multi-component systems. Probabilistic Safety Assessment & Management conference, PSAM12, 22-27 June 2014. Honolulu, Hawaii.
- H. YANG, B. JIANG, V. COCQUEMPOT, Fault tolerant spacecraft attitude control by multiple control processors, 19th IFAC World Congress, IFAC WC 2014, Cape Town, South Africa, 24-29 August 2014.
- A. HADDAD, A. AITOUICHE, V. COCQUEMPOT, Fault Tolerant Control Strategy for an Overactuated Autonomous Vehicle Path Tracking, 19th IFAC World Congress, IFAC WC 2014, Cape Town, South Africa, 24-29 August 2014.
- X. ZHANG, V. COCQUEMPOT, Fault Tolerant Control for an Electric 4WD Vehicle's Path Tracking with Active Fault Diagnosis, 19th IFAC World Congress, IFAC WC 2014, Cape Town, South Africa, 24-29 August 2014.
- R. LESOBRE, K. BOUVARD, C. BERENGUER, A. BARROS. V. COCQUEMPOT. Evaluation of maintenance decision criteria to optimize a dynamic maintenance policy based on Maintenance Free Operating Period concept, 8th International Conference on Modelling in Industrial Maintenance and Reliability, St Catherine's College, Oxford, 10 - 12 July 2014.
- X. ZHANG, V. COCQUEMPOT, Fault Tolerant Control Scheme based on Active Fault Diagnosis for the Path Tracking Control of a 4WD Electric Vehicle, IEEE MSC 2014, Multi-conference on Systems and Control : ISIC International Symposium on Intelligent Control, Antibes, France. October 8-10, 2014.

Conférences Nationales 2014 (1)

- R. LESOBRE, K. BOUVARD, C. BERENGUER, A. BARROS. V. COCQUEMPOT. Politique de maintenance dynamique pour un système multi-composant intégrant les informations de surveillance, Lambda Mu 19, 21-23 octobre 2014, Dijon, France

2013

Articles in International Journals (8)

- J. LETH, H. SCHIOELER, M. GHOLAMI, V. COCQUEMPOT. Stochastic Stability of Markovianly Switched Systems, IEEE Transactions on Automatic Control, Volume 58, Issue 8, October 2013.
- Q. SHEN, B JIANG, and V COCQUEMPOT, Adaptive fuzzy observer-based active fault-tolerant dynamic surface control for a class of nonlinear systems with actuator

faults, IEEE Transactions on Fuzzy Systems. Volume:22 , Issue: 2, pp. 338 – 349, march 2013.

- Q. SHEN, B JIANG, and V COCQUEMPOT, Adaptive fault-tolerant backstepping control against actuator gain faults and its applications to an aircraft longitudinal motion dynamics, International Journal of Robust and Nonlinear Control. Ed. Wiley. Vol. 23, pp 1753–1779. October 2913.
- Q. SHEN, B JIANG, and V COCQUEMPOT, Fuzzy Logic System-based Adaptive Fault Tolerant Control for Near Space Vehicle Attitude Dynamics with Actuator Faults, IEEE Transactions on Fuzzy Systems. Vol 21. Issue 2. pp. 289-300. April 2013.
- B. BOULKROUNE, A. AITOUICHE, I. DJEMILI, V. COCQUEMPOT. Robust nonlinear observer for fault detection : Application for Diesel Engines. International Journal of Applied Mathematics and Computer Science (AMCS). Vol. 23, n°3, 2013.
- H. YANG, B. JIANG, V. COCQUEMPOT, M. CHEN. Spacecraft formation stabilization and fault tolerance: a state-varying switched system approach, Systems & Control Letters, Elsevier Science, Volume 62, Issue 9, September 2013, Pages 715–722.
- K. ZHANG, B. JIANG, V. COCQUEMPOT, H. ZHANG, A Framework of Robust Fault Estimation Observer Design for continuous/Discrete Time System, Optimal Control, Applications and Method. Volume 34, Issue 4, pages 442–457, July/August 2013.
- S. AOUAOUDA, M. CHADLI, V. COCQUEMPOT and T KHADIR. Multi-objective H/H ∞ Fault Detection Observer Design for Takagi-Sugeno Fuzzy Systems with Unmeasurable Premise Variables: Descriptor Approach, International Journal of Adaptive Control and Signal Processing, Volume 27, Issue 12, pages 1031–1047, December 2013.

Articles in International Conferences 2013 (11)

- B. BOULKROUNE, A. AITOUICHE, V. COCQUEMPOT. Actuator fault detection and isolation for diesel engines. 2013 IEEE Multi-conference on Systems and Control, Conference on Control Applications (CCA), Hyderabad, India, August 28-30, 2013.
- B. BOULKROUNE, A. AITOUICHE, V. COCQUEMPOT. Sensor fault detection for diesel engines, IEEE International Conference on Control, Decision and Information Technologies (CoDIT'13), Hammamet, Tunisia. May 6-8, 2013.
- A. HAKEM, K. M. PEKPE, V. COCQUEMPOT. Data-projection Method for Actuator Fault Detection and Estimation. 10th IEEE International Conference on Control & Automation. ICCA 2013, Hangzhou, China, June 12-14, 2013.
- X. ZHANG, V. COCQUEMPOT, B. JIANG, H. YANG. Active Fault Diagnosis based on Fault-Tolerant Control with Control Constraints for an Electric 4WD Vehicle. 10th IEEE International Conference on Control & Automation. ICCA 2013, Hangzhou, China, June 12-14, 2013.

- B. BOULKROUNE, A. AITOUICHE, V. COCQUEMPOT, I. DJEMILI. Nonlinear Unknown Input Observer Design for Diesel Engines. IEEE American Control Conference. ACC'2013. Washington, DC, USA June 17-19, 2013.
- H. YANG, B. JIANG, V. COCQUEMPOT. On stability of nonlinear hyperbolic systems with reaction and switching. IEEE American Control Conference. ACC'2013. Washington, DC, USA June 17-19, 2013.
- X. ZHANG, V. COCQUEMPOT, Passive Variable-Structure Fault-Tolerant Control for an Electrical 4WD Vehicle subject to Input Saturation. 11th International Conference on Diagnostics of Processes and Systems, DPS 2013, Lagow Lubuski, Poland, 8–11 September 2013.
- R. LESOBRE, K. BOUVARD, C. BERENGUER, A. BARROS. A Maintenance Free Operating Period Policy for a Multi-Component System with Different Information Levels on the Components State. 2013 Prognostics and System Health Management Conference, PHM2013, Milan, Italy, September 8-11, 2013.
- X. ZHANG, V. COCQUEMPOT. Passive Variable-Structure Fault-Tolerant Control for an Electrical 4WD Vehicle subject to Input Saturation. 11th International Conference on Diagnostics of Processes and Systems, DPS 2013. 8–11 September 2013, Lagow Lubuski, Poland
- K. M. D. MOTCHON, K. M. PEKPE, J.P. CASSAR, S. De BIEVRE, V. COCQUEMPOT, Operating modes distinguishability condition in switching systems, 52nd IEEE Conference on Decision and Control, Firenze, Italy on December 10-13, 2013
- A. HADDAD, A. AITOUICHE, V. COCQUEMPOT, Hierarchical Diagnosis for an Overactuated Autonomous Vehicle, 2nd International Conference on Control and Fault Tolerant Systems, SysTol'13, Nice, France, October 9–11, 2013.

2012

Articles in International Journals (4)

- H. YANG, JIANG B., COCQUEMPOT V., LINGLI L. Supervisory Fault Tolerant Control with Integrated Fault Detection and Isolation: Switched System Approach. International Journal of Applied Mathematics and Computer Science (AMCS). Vol 22, n°1, March 2012.
- Q. SHEN, B JIANG, and V COCQUEMPOT, Fault Tolerant Control for T-S Fuzzy Systems with Application to Near Space Hypersonic Vehicle with Actuator Faults, IEEE Transactions on Fuzzy Systems. Volume 20, Issue 4, Pages: 652-665, August 2012.
- Q. SHEN, B JIANG, and V COCQUEMPOT, Adaptive Fault Tolerant Synchronization with Unknown Propagation Delays and Actuator Faults, International Journal of Control, Automation and Systems, Volume 10, Number 5, pp 1-7, October 2012.

- Q SHEN, B JIANG, and V COCQUEMPOT, Fault diagnosis and estimation for near-space hypersonic vehicle with sensor faults, *Journal of Systems and Control Engineering, Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering*, March 2012, vol. 226 no. 3, pp 302-313.

Book 2012 (1)

- Sihem Kechida, V. Cocquempot. *Méthodologies de diagnostic des systèmes dynamiques: Théories et exemples*. Editions universitaires européennes (10 septembre 2012)

Book chapters 2012 (3)

- T. Boukhobza, F. Hamelin, B. Marx, G. Mourot, A.M. Nagy, J. Ragot, D.E.C. Belkhiat, K. Guelton, D. Jabri, N. Manamanni, S. Martinez, N. Messai, V. COCQUEMPOT, A. HAKEM, K.M. PEKPE, T. ZOUARI, M. Defoort, M. Djemai et J. Van Gorp, In *Supervision, surveillance et sûreté de fonctionnement des grands systèmes*, Nada Matta, Yves Vandenkoonaerde, Jean Arlat eds., Chapitre 6, *Diagnostic des systèmes à modes multiples de fonctionnement*, pp115-154. ISBN 978-2-7462-3840-4, *Traité Information, Commande, Communication, IC2*, Hermès Science Publications, Paris, 2012.
- T. Boukhobza, F. Hamelin, B. Marx, G. Mourot, A.M. Nagy, J. Ragot, D.E.C. Belkhiat, K. Guelton, D. Jabri, N. Manamanni, S. Martinez, N. Messai, V. COCQUEMPOT, A. HAKEM, K.M. PEKPE, T. ZOUARI, M. Defoort, M. Djemai et J. Van Gorp, *Supervision and Safety of Complex Systems*, Chapter 6, *Diagnosis of Systems with, Multiple Operating Modes*, ISTE/John Wiley and Sons, USA, 2012
- A. HAKEM, M. K. PEKPE, V. COCQUEMPOT, Fault detection and isolation for switching systems using a parameter-free method, in *Diagnostics and Prognostics of Engineering Systems: Methods and Techniques*, ISBN13: 9781466620957, September 2012.

Articles in International Conferences 2012 (8)

- H. YANG, JIANG B, COCQUEMPOT V., ZHANG Y., GONG H., Tolerance of intermittent controller faults via hybrid system approach, 8th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, Mexico City, 30-31 August-1 September 2012.
- I. DJEMILI, AITOUACHE A. , COCQUEMPOT V., Fault Tolerant Control of Internal Combustion Engine subject to Intake Manifold Leakage, 8th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, Mexico City, 30-31 August-1 september 2012.
- I. DJEMILI, AITOUACHE A. , COCQUEMPOT V., Commande tolérante aux fautes de la boucle d'air d'un moteur diesel, Conférence Internationale Francophone d'Automatique, Grenoble, France, 4-6 juillet 2012

- I. DJEMILI, BOULKROUNE B., AITOUACHE A., COCQUEMPOT V. Nonlinear Unknown Input Observer for Intake Leakage Estimation in Diesel Engines, 20th Mediterranean Conference on Control and Automation, Barcelona, Spain.3-6 July, 2012
- I. DJEMILI, WANG H., AITOUACHE A., COCQUEMPOT V., BOSCHE J., EL HAJJAJI A. Control strategy for the air path dynamic system. 20th Mediterranean Conference on Control and Automation, Barcelona, Spain.3-6 July, 2012
- B. BOULKROUNE, I. DJEMILI, AITOUACHE A., COCQUEMPOT V. Nonlinear Observer Design of a Diesel Engine Model, 2nd International Conference on Systems and Control, , Marrakech, Morocco, June 20-22, 2012.
- A HADDAD, A. AITOUACHE, V. COCQUEMPOT. Fault Tolerant Control for Autonomous Vehicle by Generating References for Rear Wheels Steering. 13th IFAC Symposium on Control in Transportation Systems to be held in Sofia, Bulgaria during September 12-14, 2012.
- A. HAKEM, M. PEKPE, V. COCQUEMPOT. A Parameter-free Method for sensor Fault Detection and Isolation in Bilinear System. UKACC International Conference on Control, CONTROL 2012, Cardiff, 3-5 September 2012

2011

Articles in International Journals (7)

- H. YANG, JIANG B., COCQUEMPOT V., ZHANG H. Stabilization of Switched Nonlinear Systems with All Unstable Modes:Application to Multi-Agent Systems. IEEE Transactions on Automatic Control, 56(9), 2230-2235, 2011
- J.-P. GEORGES, D. THEILLIOL, V. COCQUEMPOT, J.-C. PONSART, C. AUBRUN. Fault Tolerance in Networked Control Systems under Intermittent Observation. International Journal of Applied Mathematics and Computer Science (AMCS). 2011, Vol. 21, No. 4, 639–648.
- K. BOUVARD, S. ARTUS, C. BERENQUER, V. COCQUEMPOT. Condition-based dynamic maintenance operations planning & grouping. Application to commercial heavy vehicles. Reliability Engineering and System Safety (RESS) Journal. Elsevier, Vol. 96, pp. 601–610, Avril 2011.
- B. JIANG, D. DU, COCQUEMPOT V. Fault Detection for Discrete-time Switched Systems with Interval Time-varying Delays. International Journal of Control, Automation and Systems : IJCAS. Vol. 9, Number 2, April 2011.
- D. BERDJAG, V. COCQUEMPOT, C. CHRISTOPHE, A. SHUMSKI, A. ZHIRABOK. Algebraic Approach for Model Decomposition: Application for Fault Detection and Isolation in Discrete-Event Systems. International Journal of Applied Mathematics and Computer Science (AMCS), Vol. 21, No. 1, 2011.

- H. YANG, JIANG B., COCQUEMPOT V. Supervisory Fault Tolerant Regulation for Nonlinear Systems, Nonlinear Analysis Series B: Real World Applications, Volume 12, pp. 789-798, 2011. <http://dx.doi.org/10.1016/j.nonrwa.2010.08.006>.
- B. JIANG, H. YANG, V. COCQUEMPOT. Results and Perspectives on Fault Tolerant Control for a Class of Hybrid Systems, International Journal of Control, Vol. 84, No. 2, February 2011, pp 396–411.

Articles in International Conferences 2011 (12)

- T. ZOUARI, K. M. PEKPE, V. COCQUEMPOT, M. KSOURI. Data Projection Method for Sensor Fault Detection and Isolation on Nonlinear Systems Based on Takagi Sugeno Model, 50th IEEE Conference on Decision and Control and European Control Conference : IEEE CDC/ECC 2011, Orlando, Florida, 12-15 December 2011.
- A. HAKEM, K. M. PEKPE, V. COCQUEMPOT, Sensor fault diagnosis for bilinear systems using data-based residuals, 50th IEEE Conference on Decision and Control and European Control Conference : IEEE CDC/ECC 2011, Orlando, Florida, 12-15 December 2011.
- B. CONRARD, V. COCQUEMPOT, S. MILI. Fault-Tolerant System Design in Multiple Operating Modes using a Structural Model. Conférence ESREL 2011 - European Safety & Reliability Conference - 18-22 September 2011 - Troyes, France
- L. YAO, H. WANG, V. COCQUEMPOT, Robust Nonlinear Actuator Fault Diagnosis for Uncertain Nonlinear Systems Subjected to State Time-varying Delays, 2011 IEEE International Conference on Modelling, identification and Control, Shanghai, China, June 26-29 2011.
- I. DJEMILI, A. AITOUICHE, V. COCQUEMPOT Adaptive observer for Intake Leakage Detection in Diesel Engines described by Takagi-Sugeno model, 19th Mediterranean Conference on Control and Automation, IEEE MED'11, Corfu, Greece on June 20-23, 2011
- M. GHOLAMI, V. COCQUEMPOT, H. SCHIOLER, T. BAK, Passive Fault Tolerant Control of Piecewise Affine Systems Based on H Infinity Synthesis, 18th IFAC World Congress, Milan, Italy, August 28 - September 2nd, 2011
- M. GHOLAMI, V. COCQUEMPOT, H. SCHIOLER, T. BAK, Passive Fault Tolerant Control of Piecewise Affine Systems with Reference Tracking and Input Constraints, MSC2011 : International Conference on Control Applications (CCA), Denver, CO, USA on September 28-30, 2011.
- I. DJEMILI, A. AITOUICHE, V. COCQUEMPOT, Structural analysis for air path of an automotive diesel engine, 2011 International Conference on Communications, Computing and Control Applications (IEEE CCCA'11), March 3-5, 2011, Hammamet, Tunisia.
- A. HADDAD, A. AITOUICHE, V. COCQUEMPOT, A. GLUMINEAU, Tolerant control for an autonomous vehicle subject to faulty steering system 2011 International

Conference on Communications, Computing and Control Applications (IEEE CCCA'11), March 3-5, 2011, Hammamet, Tunisia.

- TAKROUNI A., COCQUEMPOT V., ZANZOURI N. KSOURI M., Distinguishability and Similarity between modes in Hybrid System Monitoring, 2011 International Conference on Communications, Computing and Control Applications (IEEE CCCA'11), March 3-5, 2011, Hammamet, Tunisia.
- A. HAKEM, KM PEKPE, V. COCQUEMPOT, On Mode Discernibility and Switching Detectability for Linear Switching Systems using a Data-based Projection Method, , 23rd Chinese Control and Decision Conference, IEEE CCDC, Mianyang, China in May 23-25, 2011.
- T. ZOUARI, KM PEKPE, V. COCQUEMPOT, M. KSOURI, Robust Mode Recognition in Hybrid Dynamical Systems with Nonlinear Mode, 23rd Chinese Control and Decision Conference, IEEE CCDC, Mianyang, China in May 23-25, 2011.

2010

Book (1)

- H. YANG, JIANG B., COCQUEMPOT V. Fault tolerant control design for hybrid systems. Lecture Notes in Control and Information Sciences (LNCIS). Edition Springer Verlag. LNCIS 397. Février 2010. <http://www.springer.com/978-3-642-10680-4>

Articles in International Journals 2010 (5)

- CLARHAUT J., HAYAT S., CONRARD B., COCQUEMPOT V, Utilisation des séquences de pannes pour la conception de systèmes de commande sûrs. Application au ferroutage. JESA : Journal Européen des Systèmes Automatisés, n°1/2010. pp. 33-66, Janvier 2010.
- H. YANG, JIANG B., COCQUEMPOT V. Observer-based fault tolerant control for hybrid impulsive systems. International Journal of Robust and Nonlinear Control. vol 20. pp. 448–459, 2010.
- H. YANG, COCQUEMPOT V, JIANG B., Optimal Fault Tolerant Path Tracking Control for 4WS4WD Electric Vehicles. IEEE Transaction on Intelligent Transportation Systems, 11(1), 237-243, 2010.
- BOUVARD K, ARTUS S, BERENGUER C, COCQUEMPOT V., Dynamic cost optimization method of maintenance service planning for commercial heavy vehicles. Dans Reliability, Risk and Safety: Theory and Applications, Briš, Guedes Soares & Martorell (eds), Taylor & Francis Group, London, p. 543-550, 2010.
- H. YANG, JIANG B., COCQUEMPOT V., P. SHI, Fault Tolerant Control Design via Hybrid Petri Nets, Asian Journal of Control, Vol. 12, No. 5, pp. 1 11, September 2010.

Published online in Wiley [InterScience](http://www.interscience.wiley.com) (www.interscience.wiley.com) DOI: 10.1002/asjc.223.

Articles in International Conferences 2010 (12)

- L. YAO, COCQUEMPOT V., Fault Diagnosis and tolerant control for a class of nonlinear singular systems. 8th IEEE International Conference on Control & Automation (ICCA2010), Xiamen, China, June 9-11, 2010.
- L. YAO, COCQUEMPOT V., WANG H., Fault diagnosis and fault tolerant control for non-Gaussian singular stochastic distribution systems. 8th IEEE International Conference on Control & Automation (ICCA2010), Xiamen, China, June 9-11, 2010.
- L. YAO, COCQUEMPOT V., DONGSHU W., Fault tolerant control for a class of nonlinear systems using an iterative learning observer. International Asia Conference on Informatics in Control, Automation and Robotics (CAR 2010), Wuhan, China, March 6-7, 2010.
- BOUVARD K, ARTUS S, BERENGUER C, COCQUEMPOT V. , Planification dynamique d'opérations de maintenance tenant compte de la dégradation des composants d'un véhicule industriel. CIFA 2010: Sixième Conférence Internationale Francophone d'Automatique, Nancy, France, 2-4 juin 2010.
- CLARHAUT J., HAYAT S., CONRARD B., COCQUEMPOT V, Design of dependable system architectures for a railroad smart wagon using shared functions, 13th International IEEE Conference on Intelligent Transportation Systems - ITSC 2010, Madeira Island, Portugal, September 19 – 22, 2010,
- BOUVARD K, ARTUS S, BERENGUER C, COCQUEMPOT V. , Dynamic maintenance scheduling according to the component degradation of a commercial heavy vehicle, Lambda mu 17, La Rochelle, Octobre 2010.
- HAKIKI K., MEROUFEL A., COCQUEMPOT V., CHENAFI M., A New Adaptive Fuzzy Vector Control for Permanent Magnet Synchronous Motor Drive. 18th Mediterranean Conference on Control and Automation : IEEE MED'10, Marrakech, Maroc, June 23-25, 2010.
- H. YANG, COCQUEMPOT V., JIANG B, Supervisory Fault Tolerant Control Design via Switched System Approach. IEEE Conference on Control and Fault-Tolerant Systems, Systol'10, Nice, France, 6-8 october, 2010
- T. ZOUARI, PEKPE M.K., COCQUEMPOT V., KSOURI M., Mode Recognition of Hybrid Dynamical Systems with Nonlinear Modes using Takagi-Sugeno Models, IEEE Conference on Control and Fault-Tolerant Systems, Systol'10, Nice, France, 6-8 october, 2010
- HAKEM A., PEKPE M.K., COCQUEMPOT V., Parameter-free method for switching time estimation and current mode recognition, IEEE Conference on Control and Fault-Tolerant Systems, Systol'10, Nice, France, 6-8 october, 2010 (Accepted)

- DE FLAUGERGUES V, COCQUEMPOT V., BAYART M, PENGOV M. On non-invertibilities for structural analysis . 21th International Workshop on Principles of Diagnosis DX'10. Portland, Oregon, October 13-16, 2010.
- CLARHAUT J., HAYAT S., CONRARD B., COCQUEMPOT V, The concept of the smart wagon for improving the safety of a railroad transportation system. 12th IFAC LSS Symposium Large Scale Systems: Theory and Applications, Villeneuve d'Ascq, France, July 12th–14th, 2010.

2009

Articles in International Journals (8)

- H. YANG, COCQUEMPOT V., JIANG B, Fault tolerant control for a class of hybrid systems with uncontrollable switching, International Journal of Systems Science. International Journal of Systems Science, 40(10), 1063-1075, 2009.
- H. YANG, JIANG B., COCQUEMPOT V. A fault tolerant framework for periodic switched nonlinear systems, International Journal of Control, 82(1), 117-129, 2009.
- H. YANG, COCQUEMPOT V, JIANG B., Robust Fault Tolerant Tracking Control With Application to Hybrid Nonlinear Systems. IET Control Theory & Applications. 3(2), 211-224, 2009.
- CLARHAUT J., HAYAT S., CONRARD B., COCQUEMPOT V, Optimal design of dependable control system architectures using temporal sequences of failures. IEEE Transactions on Reliability. Vol 58, Issue 3, p511-522, 2009.
- H. YANG, JIANG B., COCQUEMPOT V, SHI P. Fault Tolerant Control Design via Hybrid Petri Nets. Asian Journal of Control. Vol.12, No.5, 2009.
- H. YANG, COCQUEMPOT V, JIANG B., On Stabilization of Switched Nonlinear Systems with Unstable Modes. System and Control Letters, Vol 58, Issue 10-11, pp 703-708, 2009
- K. ZHANG, JIANG B., COCQUEMPOT V. Fast Adaptive Fault Estimation and Accommodation for Nonlinear Time-varying Delay Systems, Asian Journal of Control, Volume 11 Issue 6, November 2009.
- H. YANG, JIANG B., COCQUEMPOT V. Fault Tolerance Analysis for Stochastic Systems Using Switching Diffusion Processes, International Journal of Control. vol. 82, n°8, pp. 1516-1525, 2009.

Articles in International Conferences 2009 (10)

- CONRARD B, COCQUEMPOT V, BAYART M. Optimisation de l'instrumentation d'un système d'automatisation sur la base d'une modélisation structurelle. QUALITA 2009, 18-20 Mars 2009, Besançon, France

- BOUVARD K, ARTUS S, BERENGUER C, COCQUEMPOT V. Dynamical maintenance operation schedule for commercial heavy vehicles using estimated degradation level. ESREL 2009, 4-10 sept 2009, Prague, Czech Republic
- CONRARD B, COCQUEMPOT V, BAYART M. Control system design with dependability criterion using structural analysis. ESREL 2009, 4-10 sept 2009, Prague, Czech Republic
- CONRARD B, COCQUEMPOT V, BAYART M. Sensor and actuator placement with dependability constraints and a cost criterion. IFAC Safeprocess 2009, Barcelona, Spain, June 30 - July 3, 2009.
- DE FLAUGERGUES V, COCQUEMPOT V, BAYART M, LEFEBVRE N. Exhaustive search of residuals computation schemes using macro-graphs and invertibility constraints. IFAC Safeprocess 2009, Barcelona, Spain, June 30 - July 3, 2009.
- YANG H, JIANG B, COCQUEMPOT V. Fault Tolerant Control in Hybrid Systems: A Brief Survey. IFAC Safeprocess 2009, Barcelona, Spain, June 30 - July 3, 2009.
- DE FLAUGERGUES V, COCQUEMPOT V., BAYART M, PENGGOV M. Structural Analysis for FDI: a modified, invertibility-based canonical decomposition. 20th International Workshop on Principles of Diagnosis DX'09. Stockholm, 14-17 Juin 2009.
- H. YANG, COCQUEMPOT V, JIANG B., Dissipativity of Hybrid Systems With Application to Supervisory Fault Tolerant Control. IFAC Int. Conference on Analysis and Design of Hybrid Systems (ADHS'09), Zaragoza, September 16-18, 2009 .
- YANG H, JIANG B, COCQUEMPOT V., A New Supervisory Fault Tolerant output Regulation Scheme for Nonlinear Systems. 48th IEEE Conference on Decision and Control and 28th Chinese Control Conference, Shanghai, december 2009.
- TAKROUNI A., COCQUEMPOT V., ZANZOURI N. KSOURI M. Behavior graphs for hybrid systems monitoring, IEEE ICCEE : International Conference on Computer and Electrical Engineering, Dubai, December 28 - 30, 2009

2008

Articles in International Journals (4)

- BOUVARD K, ARTUS S, BERENGUER C, COCQUEMPOT V. Maintenance Cost Study for Deteriorating Systems: Age-replacemant Policy vs. Condition-based Maintenance Policy. International Journal of Materials & Structural Reliability, vol. 6, n°2, p. 167-179, 2008.
- H. YANG, JIANG B., COCQUEMPOT V. Qualitative Fault Tolerance Analysis for a Class of Hybrid Systems Nonlinear Analysis: Hybrid Systems, Elsevier, 2 (3), 846-861, 2008.

- K. ZHANG, JIANG B., COCQUEMPOT V. Adaptive Observer-based Fast Fault Estimation, International Journal of Control, Automation and Systems : IJCAS special issue, vol. 6, no. 3, pp. 320-326, June 2008.
- H. YANG, COCQUEMPOT V, JIANG B., Fault tolerance analysis for switched systems via global passivity, IEEE Trans. on Circuits and Systems II, Volume 55, Issue 12, Dec. 2008. Page(s):1279 – 1283.

Book Chapter 2008 (1)

- K. M. PEKPE, C. CHRISTOPHE, V. COCQUEMPOT. Détection et localisation de défauts de capteurs pour les systèmes à structure linéaire et bilinéaire. In Diagnostic des systèmes complexes, Ed. D. Lefebvre, H. Chafouk, A. El Hami, M. Bennouna, ISBN 9954 - 8992 - 0 - 0, 2008. pp 201-217

Articles in International Conferences 2008 (11)

- YANG H., JIANG B, COCQUEMPOT V. Fault accommodation for discrete event systems using Petri nets with application to traffic light control, 17th IFAC World Congress, 2008, Séoul, Corée du Sud, Juillet 2008
- BERDJAG D., COCQUEMPOT V., CHRISTOPHE C. An algebraic approach for behavioral model decomposition, 17th IFAC World Congress, 2008, Séoul, Corée du Sud, Juillet 2008
- MAO Z, JIANG B, COCQUEMPOT V, SHI P Observer-based Fault Estimation for Networked Control Systems with Transfer Delays, IFAC World Congress, Séoul, Corée du Sud, Juillet 2008
- YANG H., JIANG B, COCQUEMPOT V. Fault tolerant control for a class of hybrid impulsive systems, Proc. of 2008 American Control Conference, Seattle, Washington, USA, 3287-3292, 2008.
- MAO Z, JIANG B, SHI P, COCQUEMPOT V High Gain Observer-based Fault Estimation for Nonlinear Networked Control Systems, Proc. of 2008 American Control Conference, Seattle, Washington, USA, 2008.
- BOUVARD K, ARTUS S, BERENGUER C, COCQUEMPOT V. Maintenance cost study for deteriorating systems: age-replacement policy vs. condition-based maintenance policy, SSARS 2008 Summer Safety and Reliability Seminars, June 22-28, 2008, Gdansk-Sopot, Poland
- CLARHAUT J., HAYAT S., CONRARD B., COCQUEMPOT V, Méthodologie de conception de systèmes sûrs et économiques utilisant les scénarios de défaillances. In 16ème Congrès de Maîtrise des Risques et de Sécurité de Fonctionnement (Lambda Mu 16), 6-10 Octobre, Avignon, France, 2008.
- CLARHAUT J., HAYAT S., CONRARD B., COCQUEMPOT V, Optimal design of control systems using a dependability criteria and temporal sequences evaluation application to a railroad transportation system. In ESREL 2008 and the 17th SRA-

Europe Conference, 22-25 septembre, Vol. n°4, pp 3199-3208, Valencia, Espagne, 2008.

- YANG H., COCQUEMPOT V., JIANG B. Hybrid Fault Tolerant Tracking Control Design for Electric Vehicles. Proc. of 16th IEEE Mediterranean Conference on Control and Automation, Corsica, France, 1210-1215, 2008.
- YANG H., COCQUEMPOT V., JIANG B. Fault tolerance analysis for a class of stochastic systems, Proc. of 16th IEEE Mediterranean Conference on Control and Automation, Corsica, France, 1222-1227, 2008.
- TAKROUNI, A. ZANZOURI, N., COCQUEMPOT, V., KSOURI M. Mode Identification and Fault Detection for Hybrid Dynamical Systems using Luenberger Observers. International Conference on Electrical Engineering Design and Technologies (ICEEDT'08), November 8-10, 2008, Hammamet, Tunisia

2007

Articles in International Journals (2)

- H. YANG, JIANG B., COCQUEMPOT V. Fault Accommodation for Hybrid Systems with Continuous and Discrete Faults. Lecture Notes in Computer Science (LNCS), Springer Verlag, Berlin Heidelberg, vol. 4416, pp. 789-792, 2007
- H. YANG, JIANG B., COCQUEMPOT V. Observer-based Fault Tolerant Control for Constrained Switched Systems, International Journal of Control, Automation and Systems : IJCAS Vol 5, No 6, pp. 707-711 December 2007.

Book Chapter 2007 (1)

- V. COCQUEMPOT, Diagnostic des Systèmes Dynamiques Hybrides, Chapitre 7, 35 pages, Traité IC2, série Systèmes Automatisés "Supervision des procédés complexes", HERMES. Février 2007

Articles in International Conferences 2007 (10)

- CONRARD B, COCQUEMPOT V., BAYART M. Conception De Systèmes d'Automatisation selon des critères de Coût et de Sûreté de fonctionnement, 7ème Congrès international pluridisciplinaire Qualité et Sûreté de Fonctionnement, Qualita 2007, Tanger, Maroc, 20-22 mars 2007
- PEKPE M., COCQUEMPOT V., CHRISTOPHE C, Model-free residual generation for sensor fault detection and isolation in bilinear systems, 7ème Congrès international pluridisciplinaire Qualité et Sûreté de Fonctionnement, Qualita 2007, Tanger, Maroc, 20-22 mars 2007
- YANG H., JIANG B., COCQUEMPOT V. Fault Accommodation for Hybrid Systems with Continuous and Discrete Faults, 10th International Conference on Hybrid Systems : Computation and Control : HSCC'07, Pisa, Italy, April 3-5, 2007

- YANG H., COCQUEMPOT V, JIANG B., Fault Diagnosis and Fault Tolerant Control Design for a class of Hybrid Systems, European Control Conference 2007, Kos, Greece, July 2-5, 2007.
- PEKPE M., CHRISTOPHE C, COCQUEMPOT V., A data driven method for sensor fault detection and isolation in bilinear systems, European Control Conference 2007, Kos, Greece, July 2-5, 2007.
- YANG H., COCQUEMPOT V, JIANG B., Continuous and discrete state estimation for a class of hybrid nonlinear systems, IFAC workshop of dependable control of discrete systems, Paris, France, June 13-15 2007.
- DONG M., JIANG B., COCQUEMPOT V. Neural Network Fuzzy Observer based Fault Diagnosis for Nonlinear Systems, 4th International Conference on Fuzzy Systems and Knowledge Discovery (FSKD'07) , Haikou, China from 24- 27 August 2007
- CLARHAUT J., HAYAT S., CONRARD B., COCQUEMPOT V, Safety system conception by using a semi quantitative reliability evaluation : application to piggyback service, IESM'2007, Industrial engineering and systems management conference, May 30-June 2, 2007 Beijing, China. p. 330-331, ISBN 978-7-302-15312-2, Tsinghua University Press, Beijing, China.
- YANG H., COCQUEMPOT V, JIANG B., Fault Tolerant Strategy for Hybrid Longitudinal Control System of Automated Vehicles, 46th IEEE Conference on Decision and Control, New Orleans, Louisiana USA, December 12-14, 2007
- BERDJAG D., CHRISTOPHE C., COCQUEMPOT V., Constrained decomposition method for behavioral models., Workshop ACD2007, Grenoble, France, Novembre 2007.

2006

Articles in International Journals (4)

- DUSTEGOR D., FRISK E., COCQUEMPOT V., KRYSSANDER, M., STAROSWIECKI M. Structural Analysis of Fault Isolability in the DAMADICS Benchmark, CEP: Control Engineering Practice. Vol 14, issue 6, June 2006, pp. 597-608.
- SKOVMOSE KALLESOE., COCQUEMPOT V., IZADI-ZAMANABADI R. Model Based Fault Detection in a Centrifugal Pump Application, IEEE Transaction on Control Systems Technology, vol 14, n°2, March 2006.
- JIANG B., STAROSWIECKI M., COCQUEMPOT V. Fault accommodation for nonlinear dynamic systems, IEEE Transaction on Automatic Control, Volume 51, Number 9, pp 1578-1583, Septembre 2006.
- BERDJAG D., CHRISTOPHE C., COCQUEMPOT V., JIANG B Nonlinear Model Decomposition for Robust Fault Detection and Isolation Using Algebraic Tools,

Articles in International Conferences 2006 (7)

- BERDJAG D., CHRISTOPHE C, COCQUEMPOT V, Décomposition de systèmes non-linéaires : application à la détection et à la localisation des défaillances, accepté à CIFA 2006, Bordeaux
- BERDJAG D., CHRISTOPHE C, COCQUEMPOT V, An Algebraic Method for Nonlinear System Decomposition, 6th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, IFAC Safeprocess 2006, 29 Aug. – 1 sept. 2006, Beijing, China
- YANG H., JIANG B., COCQUEMPOT V., STAROSWIECKI M., Adaptive Fault Tolerant Strategy For Hybrid Systems With Faults Independently Effecting On Outputs, 6th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, IFAC Safeprocess 2006, 29 Aug. – 1 sept. 2006, Beijing, China
- DUSTEGOR D., COCQUEMPOT V., STAROSWIECKI M., Adaptive structural analysis for FDI design in evolving systems, 6th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, IFAC Safeprocess 2006, 29 Aug. – 1 sept. 2006, Beijing, China
- MAZA S, BAYART M, CONRARD B, COCQUEMPOT V, On the dependability design of complex Systems, 30th [ESReDA](#) Seminar: Reliability of Safety-Critical System, SINTEF, Trondheim, Norway June 7-8, 2006
- BERDJAG D., CHRISTOPHE C, COCQUEMPOT V, Nonlinear Model Decomposition for Fault Detection and Isolation System Design, 45th IEEE Conference on Decision and Control (CDC06), San Diego, California USA. 13-15 dec. 2006.
- CLARHAUT J., HAYAT S., CONRARD B., COCQUEMPOT V, Safety Intelligent system conception for piggyback service, IEEE International Conference on Industrial Technology, ICIT 06, Mumbai, India, 15-17 dec 2006.

1990-2005

Articles in International Journals (8)

- JIANG B., STAROSWIECKI M., COCQUEMPOT V. Fault diagnosis based on adaptive observer for a class of nonlinear systems with unknown parameters. *Int. Journal of Control (IJC)*, 10 March 2004, VOL. 77, NO. 4, 415–426, 2004;
- JIANG B., STAROSWIECKI M., COCQUEMPOT V. Fault Estimation in Nonlinear Uncertain Systems using Robust/Sliding Mode Observers. *IEE Control Theory and Application (IEE-CTA)*, vol 151, n°1, pp. 29-37, January 2004.
- Düstegör D., Cocquempot V., Staroswiecki M., Frisk E. Isolabilité Structurale des défaillances - Application à un modèle de vanne. *JESA : Journal Européen des Systèmes Automatisés*, Volume 38 – n°1-2/2004, pages 103 à 123.

- Christophe C., Cocquempot V., Jiang B. Link between high gain observer-based residual and parity space one for FDI. *Transactions of the Institute of Measurement and Control*, Arnold Publisher, Volume 26, Issue 4, August 2004.
- CASSAR J.P.C, LITWAK R.G., COCQUEMPOT V., STAROSWIECKI M. Approche structurelle de la conception de systèmes de surveillance pour des procédés industriels complexes. *Revue Européenne de Diagnostic et sûreté de fonctionnement* - Vol 4, n°2/1994, p. 179-202
- JIANG B, STAROSWIECKI M., COCQUEMPOT V. Robust fault diagnostic filter design for bilinear stochastic systems. *Control and Intelligent Systems*, Vol. 29, n°1, 2001, pp 1-7.
- CHANG X., COCQUEMPOT V., CHRISTOPHE C. A Model of Asynchronous Machines for Stator Fault Detection and Isolation. *IEEE transaction on Industrial Electronics*, Volume 50, Number 3, pp 578-584, June, 2003.
- JIANG B., STAROSWIECKI M., COCQUEMPOT V. H-infinity fault detection filter design for linear discrete-time systems with multiple time delays. *International Journal of System Science (IJSS)* – Pub. Taylor & Francis – pp. 365 – 373, Vol. 34, No. 5, 2003;

Articles in International Conferences 1990-2005 (43)

- STAROSWIECKI M, CASSAR J.P, COCQUEMPOT V Generation of analytical redundancy relations in a linear interconnected system. *IMACS, MIN-S2'90, Bruxelles, Septembre 1990*
- STAROSWIECKI M, COCQUEMPOT V, CASSAR J.P Observer based and parity space approaches for failure detection and identification. *IMACS/IFAC Symposium on "Modelling and Control of Techno-Logical Systems", Lille, Vol 2, Proc. pp 536-541, Mai 1991.*
- COCQUEMPOT V, CASSAR J.P, STAROSWIECKI M. Generation of robust analytical redundancy relations. *European Control Conference 91, Grenoble, Vol 1, pp309-314, Juillet 1991*
- STAROSWIECKI M, COCQUEMPOT V, CASSAR J.P. Optimal design of FDI system via parity space and observer based approach. *IECON'91 Kobé (Japon), octobre 1991, Vol 1, pp 143-148.*
- CASSAR J.P, DJEGHABA M, STAROSWIECKI M, COCQUEMPOT V. Sensitivity robustness trade off via the generation of optimal residuals in the parity space. *IEEE SICICI'92, Singapour (Malaisie), Février 1992, Vol 1, p 54.*
- STAROSWIECKI M, CASSAR J.P., COCQUEMPOT V. A general approach for multi-criteria optimization of structured residuals. *TOOLDIAG'93, Toulouse, Avril 1993, Vol 2, pp 800-807.*
- CASSAR J.P, STAROSWIECKI M, COCQUEMPOT V. Generation of optimal structured residuals in the parity space. *Mondial IFAC Congress, Sydney (Australie), Juillet 1993, Vol 8, pp 299-306.*
- CASSAR J.P, STAROSWIECKI M, COCQUEMPOT V Optimal residual design for model based fault detection and isolation. A review and new results *IEEE International conf. on syst., Man and Cybernetics - Le Touquet - France - Octobre 1993.*
- CASSAR J.P, STAROSWIECKI M, COCQUEMPOT V Optimal Residual Design for Model-Based Fault Detection and Isolation. *3rd European Control Conference ECC95, Roma, Italy, pp. 1986-1992, september 1995*

- COCQUEMPOT V., CASSAR J.P., STAROSWIECKI M. How does the Time Window Size Influence the Sensitivity/Robustness Trade-off of Optimal Structured Residuals. *SafeProcess'97, IFAC Symp. on Fault Detection, Supervision and Safety for Technical Processes, Hull (UK), Août 1997, pp. 329-334*
- Cocquempot V., Dagues B., Roboam X., Lemaire-Semail B. Fault Detection and Isolation System Evaluation for an Asynchronous Drive Using POSTMAC Software. *SDEMPED'97, IEEE Symp. on Diagnostics for Electrical Machines, Power Electronics and Drive, Carry-le Rouet (France), Sept. 1997, pp.270-276.*
- Maquin D., Cocquempot V., Cassar J. P, Staroswiecki M., Ragot J. *Generation of Analytical Redundancy Relations for FDI Purposes.* SDEMPED'97, IEEE Symp. on Diagnostics for Electrical Machines, Power Electronics and Drive, Carry-le Rouet (France), Sept. 1997, pp.86-93.
- Izadi Zamanabadi R., Staroswiecki M., Cocquempot V. Structural Analysis Approach to FDI for the Ship Propulsion Benchmark. *Workshop COSY (Control of complex system) (thème 2), Mulhouse, 3-4 avril 1998.*
- COCQUEMPOT V., IZADI-ZAMANABADI R., STAROSWIECKI M., BLANKE M. Residual Generation for the Ship Benchmark Using Structural Approach. *International Conference on CONTROL'98, Swansea (UK), Sept. 1998, pp. 1480-1485*
- COMTET-VARGA G., CHRISTOPHE C.,COCQUEMPOT V., STAROSWIECKI M. FDI for the induction motor using elimination theory, *European Control Conference ECC'99, Karlsruhe, Germany, Septembre 1999*
- CHRISTOPHE C., COCQUEMPOT V., STAROSWIECKI M., *Robust residual generation for the induction motor using elimination theory,* IEEE Internat. Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives, Gijon, Spain, September 1999.
- COCQUEMPOT V., CHRISTOPHE C. *On the Equivalence between Observer-Based and Parity Space Approaches for F.D.I in Non-Linear Systems,* SafeProcess 2000, IFAC Symp. on Fault Detection, Supervision and Safety for Technical Processes, Budapest, juin 2000, pp. 232-237 * Christophe C., Cocquempot V., Staroswiecki M. *Non Sinusoïdal Residual Generation for FDI of Induction Motor,* 4th IFAC International Symposium on Intelligent Components and Instruments for Control Applications SICICA 2000, Buenos Aires, Septembre 2000
- JIANG B, M. STAROSWIECKI, COCQUEMPOT V. *Fault diagnosis for a class of nonlinear systems with unknown parameters.* IFAC Supervision of Chemical Processes 2001, Séoul, Corée, pp. 181-186
- JIANG B, STAROSWIECKI M., COCQUEMPOT V, CHRISTOPHE C. *Adaptive observer based FDI : Application to sensor fault diagnosis for induction motor.* IEEE SDEMPED 2001, Trieste, Italie, pp. 265-270
- JIANG B, STAROSWIECKI M., COCQUEMPOT V. *Robust Fault Diagnostic Filter Design for Bilinear Stochastic Systems.* Proceedings of European Control Conference (ECC'01), Porto (Portugal), 4-7 Septembre 2001, pp.1373-1377.
- IANG B, M. STAROSWIECKI, V. COCQUEMPOT V. *Robust observer based fault diagnosis for a class of nonlinear systems with uncertainties.* Proceedings of the 40th IEEE Conference on Decision and Control (CDC'01), Orlando, Florida USA, December 2001, pp. 161-166.
- JIANG B, M. STAROSWIECKI, V. COCQUEMPOT V. *H-infinity fault detection filter for a class of discrete-time systems multiple time delays.* IFAC World Congress'02, Barcelone, Juillet 2002 , pp. 770-775

- *JIANG B, COCQUEMPOT V., CHRISTOPHE C. Fault diagnosis using sliding mode observer for nonlinear systems. IFAC World Congress'02, Barcelone, Juillet 2002, pp674-679*
- *CHRISTOPHE C., COCQUEMPOT V., JIANG B. Link between high-gain observer based residual and parity space one. American Control Conference (ACC'02), Anchorage (Alaska), mai 2002*
- *JIANG B, M. STAROSWIECKI, COCQUEMPOT V. Fault Identification for a class of time-delay systems. American Control Conference (ACC'02), Anchorage (Alaska), mai 2002*
- *Chang X., Cocquempot V., Christophe C. Modélisation de la machine asynchrone en présence de pannes stator. CIFA02 : Conférence Internationale en Automatique, Nantes, Juillet 02*
- *Chang X., Cocquempot V., S. Zhao, Christophe C. The Model of Asynchronous Induction Machines, PowerCon'02 : International Conference on Power System Technology. Kunming, P.R.China., paper n° 1086, Oct.13-17,2002*
- *Jiang B., Staroswiecki M., Cocquempot V, Active fault tolerant control for a class of nonlinear systems, Proc. of IFAC SAFEPROCESS'03, Washington, Juin 2003.*
- *Cocquempot, V., Staroswiecki, M., el Mezyani, T. Switching time estimation and fault detection for hybrid systems using structured parity residuals, Proc. of IFAC SAFEPROCESS'03, Washington, Juin 2003.*
- *Frisk, E., Dustegor, D., Krysander, M., Cocquempot, V. Improving fault isolability properties by structural analysis of faulty behavior models: Application to the DAMADICS benchmark problem, Proc. of IFAC SAFEPROCESS'03, Washington, Juin 2003.*
- *ARTUS S., HAYAT S, STAROSWIECKI M., COCQUEMPOT V. A brake disc's temperature estimation module , SCSC2003, 2003 Summer Computer Simulation Conference, Montreal, Juil. 2003*
- *Cocquempot V., El Mezyani T., Staroswiecki M. Fault Detection and Isolation for Hybrid Systems using Structured Parity Residuals, IEEE/IFAC-ASCC'2004 :Asian Control Conference, Juil 2004.*
- *Kallesøe C, IZadi-Zamanabadi R, COCQUEMPOT V and Rasmussen H. Model Based Fault Diagnosis in a Centrifugal Pump Application using Structural Analysis, IEEE Conference on Control Application : CCA'04, sept 2004, Taipei, Taiwan.*
- *Düstegör D., Cocquempot V., Staroswiecki M. Structural Analysis for Residual Generation: Towards Implementation, IEEE Conference on Control Application: CCA'04, sept 2004, Taipei, Taiwan.*
- *Düstegör D., Cocquempot V., Staroswiecki M. Structural Analysis for Residual Generation : implementation Issues Consideration, IEE-Control 2004, Bath (UK), septembre 2004.*
- *Düstegör D., Cocquempot V., Staroswiecki M. Structural Analysis for Fault Detection and Isolation : an Algorithmic Study, IFAC SSSC'04 : System, structure and Control, Oaxaca (Mexique), 7-11 décembre 2004*
- *S. ARTUS, V. COCQUEMPOT, M. STAROSWIECKI, S. HAYAT, C. COVO. Temperature Estimation of CHV Brake Discs using an Energy Balance Approach, IEEEITS'04 : Intelligent transportation systems, Washington DC, Octobre 2004*
- *Cocquempot V., Staroswiecki M., El Mezyani T. Surveillance des systèmes hybrides non linéaires à l'aide de Relations de Redondance Analytiques, IEEE CIFA04 : Conférence Internationale Francophone d'Automatique, Douz (Tunisie) 2004. * Artus S., Cocquempot V., Hayat S., Staroswiecki M., De Larminat P., Covo C. CHV's Brake*

Disc Temperature Estimation: results in open road tests, IEEE- Intelligent Transportation System Conference, septembre 2005, Vienne Autriche

- *Cocquempot V, El Mezyani T., Staroswiecki M. Hybrid Dynamical Systems Monitoring using Structured Analytical Redundancy Relations* 17^{ème} IMACS World Congress, Paris, France 11 - 15 Juillet 2005
- *Artus S., Cocquempot V., Hayat S., Staroswiecki M., De Larminat P., Covo C. CHV's braking system structural analysis: contribution to discs brake temperature estimation*, 17^{ème} IMACS World Congress, Paris, France 11 - 15 Juillet 2005
- *BERDJAG D., CHRISTOPHE C., COCQUEMPOT V. Algebraic Method for Robust Fault Detection and Isolation on Nonlinear Systems*, IAR-ACD'05, Workshop on advanced control and diagnosis, Mulhouse, November 2005