



Information personnelle

Nom(s) / Prénom(s) **Castaños Luna Fernando**
Adresse(s) Av. Instituto Politécnico Nacional No. 2508, Col. San Pedro Zacatenco, C.P. 07360, México D.F., México
Téléphone(s) +52 (55) 57 47 37 35
Courrier(s) électronique(s) castanos@ieee.org
Nationalité(s) Mexicaine
Date de naissance 1976

Thèmes de recherche

Commande non linéaire, systèmes Hamiltoniens, systèmes implicites, génie de la morphologie du cerveau, commande fondée sur la passivité, commande robuste et systèmes à structure variable

Formation

2006 – 2009 *Doctorat* : Physique, Science de l'Automatique. Encadré par Romeo Ortega
Thèse : Cyclo-passivité et contrôle par interconnexion
Université Paris-Sud XI (UPS) – Laboratoire des signaux et systèmes (L2S) – SUPÉLEC, France

2005 – 2006 *Mastère Recherche* : Automatique et traitement du signal et des images. Encadré par Romeo Ortega
Stage : Participation à un projet de recherche visant à développer des lois de commande basées sur la passivité. L2S
UPS – L2S – SUPÉLEC

2003 – 2004 *Mastère* : Génie Électrique, Contrôle Automatique. Encadré par Leonid Fridman
Thèse : Modes glissants avec un critère \mathcal{H}_∞ et application à la commande décentralisée
Universidad Nacional Autónoma de México (UNAM). Mexique

1995 – 2002 *Licence* : Génie Électrique et Électronique, Traitement du Signal. Encadré par Rolando Carrera
Thèse : Soulevé et stabilisation d'un pendule inverse. Faculté d'Ingénierie, UNAM
Stage : Participation à un projet visant à détecter des fuites en utilisant des observateurs. Institut d'Ingénierie, UNAM

Expérience professionnelle

Postes

Mar. 2019 – Éditeur de l'International Journal of Robust and Nonlinear Control, Wiley

Mar. 2014 – Chercheur. Département de Commande Automatique (DCA). Centro de Investigación y de Estudios Avanzados del IPN (Cinvestav), Mexico. Niveau 3C. Directeur des études d'avril 2015 à mars 2017

Sep. 2011 – Feb. 2014 Chercheur visiteur. DCA, Cinvestav

Sep. 2009 – Août 2011 Boursier post-doctoral. McGill Center for Intelligent Machines. Commande de locomotion chez les robots androïdes, Université de McGill, Canada. Sous la direction de Hannah Michalska et Vincent Hayward

2001 – 2002	Activité libérale. Développement de réseaux d'ordinateurs. Conception et réalisation de sites web
1998 – 2000	Consultant SSE-México. Conception et réalisation des modèles financiers dans les systèmes informatiques. Développement des interfaces entre les systèmes transactionnels et les interfaces d'utilisateur
	<i>Séjours scientifiques</i>
2018, 2015	Dmitry Gromov. Systèmes Hamiltoniens implicites à ports. Saint Petersburg State University, St. Petersburg, Russie. Deux semaines, une semaine, respectivement
2017	Emmanuel Nuño. Commande fondée sur la passivité en utilisant des fonctions multi valuées. University of Guadalajara, Guadalajara, Mexico. Une semaine
2014	Alessio Franci. Réalisation de comportements nonlinéaires complexes par théorie de singularités. Département d'Ingenierie, University of Cambridge, Royaume Uni. Une semaine
2012, 2013	Cristian Kunusch. Minimisation de la consommation d'hydrogène dans les piles à combustible. Institut de Robòtica i Informàtica Industrial. Barcelona, Espagne. Deux semaines, une semaine, respectivement
2009	Riyanto Bambang. Commande de puissance pour les véhicules électriques. Institute of Technology Bandung. Bandung, Indonésie. Deux semaines
2008	David Hill et Jun Zhao. Applications de la théorie de la dissipativité des systèmes à commutations. Australian National University. Canberra, Australie. Quatre semaines Bayu Jayawardhana, Arjan van der Schaft et Jacquélien Scherpen. Modèles fondés sur la puissance; commande par interconnexion. University of Groningen. Groningen, Pays-Bas. Une semaine
2007	Ravi Banavar et Arun Mahindrakar. Indian Institute of Technology. Commande par interconnexion dans le cas de dimension infinie. Mumbai et Chennai, Inde. Quatre semaines
2006	Jacquélien Scherpen et Dimitri Jeltsema. Passivité relative appliquée à la conception de convertisseurs de puissance. Delft University of Technology. Delft, Pays-Bas. Une semaine Arjan van der Schaft. Systèmes Hamiltoniens à commutation. University of Groningen. Une semaine
	<i>Projets</i>
2009	Power flow control of fuel-cell powered vehicles (auteur). NUSANTARA, budget 5,000 €
2008	Transient Stability of Power Systems. FAST, budget 6,800 €
2006	Control of Active Filters considering Dynamic Loads. LAFMAA, budget 13,950 €
	<i>Cours enseignés</i>
	<i>Cinvestav, cycles supérieurs :</i>
Jan. – Avr. 2020	Commande Robuste
Mai. – Août. 2019, 2018	
Sep. – Déc. 2019	Systèmes Homogènes et Systèmes à Retards
Mai. – Août. 2017	Commande par Modes Glissantes
Jan. – Avr. 2017, 2016	Commande Optimale
2015, 2014	
Mai. – Août. 2016, 2015	Systèmes Non Linéaires
2013	
Jan. – Avr. 2013	Commande Numérique
Jan. – Avr. 2012	Théorie de Commande II
	<i>Université de McGill :</i>
Jan. – Jun. 2011	Conception de Projets I et II, licence
Sep. – Déc. 2010	ECSE 404 (Systèmes de Commande, licence)
Jan. – Avr. 2011	ECSE 507 (Optimisation et Commande Optimale, master)
	<i>Étudiants gradués</i>
Août. 2021	Master, Bryan Rojas. Mise au point des observateurs-prédicteurs pour systèmes non linéaires à retards sur l'entrée, codirigé avec Sabine Mondié (Cinvestav)

Sep. 2020	Doctorat, Gian Gómez. Modes glissantes et représentations géométriques : commande des corps rigides, codirigé avec Jorge Dávila (ESIME-IPN, Mexique)
Déc. 2016	Doctorat, Félix Miranda. Techniques de commande robuste par analyse convexe non lisse
Août. 2016	Master, Carlos Tovar. Conception de circuits neuromorphiques en utilisant la théorie de singularités, codirigé avec Alessio Franci (UNAM)
Déc. 2015	Doctorat, Debbie Hernández. Commande des systèmes implicites par modes glissants, codirigé avec Alexander Poznyak (Cinvestav)
Nov. 2015	Master, Pedro Flores. Commande d'un quadrirotor dans un environnement non structuré, codirigé avec Pedro Castillo (Heudyasic, France)
Nov. 2014	Master, Christopher Cruz. Coordination d'agents par aménagement de référence, codirigé avec Jorge Dávila
Nov. 2013	Master, Edgar Estrada. Approche passivité pour la commande de systèmes à retards, codirigé avec Sabine Mondié
Nov. 2012	Master, Félix Miranda. Commande LQ optimale pour une classe de systèmes aux entrées constantes par morceaux, codirigé avec Vadim Azhmyakov (Cinvestav)

Associations professionnelles

IEEE	Institute of Electrical and Electronics Engineers, Control Systems Society, depuis 2006
SIAM	Society for Industrial and Applied Mathematics, depuis 2007

Compétences et acquis personnels

Formations complémentaires

	HYCON-EECI
2009	The Behavioral Approach to Modeling and Control. Paolo Rapisarda et Jan C. Willems Nonlinear Output Regulation. Alberto Isidori
2008	Robotics, Geometry and Control. Ravi Banavar
2007	Modeling Analysis and Design of Hybrid Control Systems. Joao Pedro Hespanha Nonlinear Adaptive Control with Applications. Alessandro Astolfi Switched Systems and Control. Daniel Liberzon
	CTS-HYCON
2006	Stability and Stabilisation of Time-Varying Systems. Antoine Chaillet Optimality, Stabilization and Feedback in Nonlinear Control. Francis Clarke Hybrid Control Systems. Christophe Prieur

Langue(s) maternelle(s)

Espagnol

Autres langues

Anglais

277 / 300 TOEFL

Français

TCF 536 / 699 niveau 5 C1

Reconnaisances

2022	Membre du Système National de Chercheurs (SNI), Chercheur Niveau II, Mexique
2017, 2016, 2013	Promotion à chercheur niveau 3C, 3B et 3A, respectivement. Délivré par Cinvestav
2018, 2014, 2011	Membre du SNI, Chercheur Niveau I
2009	Félicitations du jury pour les thèses de doctorat et de master
1995 – 1997	Bourse du <i>Programa de Alto Rendimiento Académico</i> de la Facultad d'Ingénierie (UNAM), dont l'un des buts est de créer des conditions de haute concurrence académique

Publications

Revues

(1 IEEE TIE, 5 Automatica, 5 IEEE TAC, 2 SIAM SICON, 1 SIAM SIADS, 5 Syst. Control Lett., 2 Int. J. Robust Nonlin., 2 Int. J. Control, 2 EJC, 1 Circuits Syst. Signal Process., 1 IMA J. Math. Control. Info., 1 Neurocomputing, 1 J. R. Soc. Interface)

Emanuel Rocha, Fernando Castaños, and Jaime A. Moreno.

Robust finite-time stabilisation of an arbitrary-order nonholonomic system in chained form.

Automatica, 135 :109956, January 2022

Fernando Castaños and Sabine Mondié.

Observer-based predictor for a susceptible-infectious-recovered model with delays : An optimal-control case study.

Int. J. Robust Nonlinear Control, 31 :5118 – 5133, July 2021

Marco Tulio Angulo, Fernando Castaños, Rodrigo Moreno-Morton, Jorge X. Velasco-Hernández, and Jaime A. Moreno.

A simple criterion to design optimal non-pharmaceutical interventions for mitigating epidemic outbreaks.

J. R. Soc. Interface, 18 :20200803, 2021

Dmitry Gromov and Fernando Castaños.

Self-oscillations in an alpha Stirling engine : a bifurcation analysis.

SIAM J. Appl. Dyn. Sys., 19 :1865 – 1883, August 2020

Félix Miranda, Fernando Castaños, and Bernard Brogliato.

Continuous and discrete-time stability of a robust set-valued nested controller.

Automatica, 107 :406 – 417, September 2019.

Nominated by the editor

Fernando Castaños, Edgar Estrada, Sabine Mondié, and Adrián Ramírez.

Passivity-based PI control of first-order systems with I/O communication delays : a frequency domain analysis.

Int. J. Control, 91 :2549 – 2562, November 2018

Félix Miranda, Bernard Brogliato, and Fernando Castaños.

Set-valued sliding-mode control of uncertain linear systems : Continuous and discrete-time analysis.

SIAM J. Control Optim., 56 :1756 – 1793, May 2018

Félix Miranda, Bernard Brogliato, and Fernando Castaños.

Multivalued robust tracking control of Lagrange systems : Continuous and discrete-time algorithms.

IEEE Trans. Autom. Control, 62 :4436 – 4450, September 2017

Fernando Castaños and Alessio Franci.

Implementing robust neuromodulation in neuromorphic circuits.

Neurocomputing, 233 :3 – 13, April 2017

Félix Miranda and Fernando Castaños.

Robust output regulation of strongly passive linear systems with multivalued maximally monotone controls.

IEEE Trans. Autom. Control, 62 :238 – 249, January 2017

Debbie Hernández-Zárate, Fernando Castaños, and Leonid Fridman.

Zero-dynamics design and its application to the stabilization of implicit systems.

Systems and Control Lett., 98 :74 – 78, December 2016

Andrea Aparicio Martínez, Fernando Castaños, and Leonid Fridman.

Output feedback sliding-mode control with unmatched disturbances, an ISS approach.

Int. J. Robust Nonlinear Control, 26 :4056 – 4071, December 2016

Félix Miranda, Fernando Castaños, and Alexander Poznyak.

Min–max piecewise constant optimal control for multi-model linear systems.

IMA J Math Control Info, 33 :1157 – 1176, December 2016

Fernando Castaños and Dmitry Gromov.
 Passivity-based control of implicit port-Hamiltonian systems with holonomic constraints.
Systems and Control Lett., 94 :11 – 18, August 2016

Fernando Castaños and Cristian Kunsch.
 Ditherless extremum seeking for hydrogen minimization in PEM fuel cells.
IEEE Trans. Ind. Electron., 62 :5218 – 5226, August 2015

Manuel Mera, Fernando Castaños, and Alexander Poznyak.
 Quantised and sampled output feedback for nonlinear systems.
Int. J. Control, 87 :2475 – 2487, December 2014

Fernando Castaños, Debbie Hernández-Zárate, and Leonid Fridman.
 Integral sliding-mode control for linear time-invariant implicit systems.
Automatica, 50 :971 – 975, March 2014

Fernando Castaños, Dmitry Gromov, Vincent Hayward, and Hannah Michalska.
 Implicit and explicit representations of continuous-time port-Hamiltonian systems.
Systems and Control Lett., 62 :324 – 330, April 2013

Matteo Rubagotti, Antonio Estrada, Fernando Castaños, Antonella Ferrara, and Leonid Fridman.
 Integral sliding mode control for nonlinear systems with matched and unmatched perturbations.
IEEE Trans. Autom. Control, 56 :2699 – 2704, November 2011

Fernando Castaños and Leonid Fridman.
 Dynamic switching surfaces for output sliding mode control : An \mathcal{H}_∞ approach.
Automatica, 47 :1957–1961, September 2011

Fernando Castaños.
 Discussion on : “Energy shaping of port-Hamiltonian systems by using alternate passive input-output pairs”.
European Journal of Control, 16 :678 – 679, December 2010

Fernando Castaños and Romeo Ortega.
 Energy-balancing passivity-based control is equivalent to dissipation and output invariance.
Systems and Control Lett., 58 :553 – 560, August 2009

Fernando Castaños, Romeo Ortega, Arjan J. van der Schaft, and Alessandro Astolfi.
 Asymptotic stabilization via control by interconnection of port-Hamiltonian systems.
Automatica, 45 :1611 – 1618, July 2009

Fernando Castaños, Bayu Jayawardhana, Romeo Ortega, and Eloísa García-Canseco.
 Proportional plus integral control for set-point regulation of a class of nonlinear RLC circuits.
Circuits Syst. Signal Process., 28 :609 – 623, August 2009

Romeo Ortega, Arjan J. van der Schaft, Fernando Castaños, and Alessandro Astolfi.
 Control by interconnection and standard passivity-based control of port-Hamiltonian systems.
IEEE Trans. Autom. Control, 53 :2527 – 2542, December 2008

Eugenii Shustin, Leonid Fridman, Emilia Fridman, and Fernando Castaños.
 Robust semiglobal stabilization of the second order system by relay feedback with an uncertain variable time delay.
SIAM J. Control Optim., 47 :196 – 217, January 2008

Bayu Jayawardhana, Romeo Ortega, Eloísa García-Canseco, and Fernando Castaños.
 Passivity of nonlinear incremental systems : Application to PI stabilization of nonlinear RLC circuits.
Systems and Control Lett., 56 :618 – 622, September 2007

Fernando Castaños and Leonid Fridman.
 Analysis and design of integral sliding manifolds for systems with unmatched perturbations.
IEEE Trans. Autom. Control, 51 :853 – 858, May 2006

Yuri Orlov, Leonid Fridman, and Fernando Castaños.
 Discussion on : “Dynamic sliding mode control for a class of systems with mismatched uncertainty”.
European Journal of Control, pages 11–18, 2005

Chapitres de livres

Ismael Castillo, Fernando Castaños, and Leonid Fridman.
Sliding surface design for higher-order sliding modes.
In Leonid Fridman, Jean-Pierre Barbot, and Franck Plestan, editors, *Recent Trends in Sliding Mode Control*, chapter 1.2, pages 29 – 57. The Institution of Engineering and Technology, Herts, United Kingdom, 2016

Fernando Castaños, Jian-Xin Xu, and Leonid Fridman.
Integral sliding modes for systems with matched and unmatched uncertainties.
In Christopher Edwards, Enric Fossas Colet, and Leonid Fridman, editors, *Advances in Variable Structure and Sliding Mode Control*, chapter 11, pages 227 – 246. Springer-Verlag, Berlin, 2006

Congrès

8 CDC (IEEE, international), 11 IFAC (international), 1 ACC (international), 1 CCE (IEEE, international), 1 ICUAS (international), 1 IFAC (régional), 4 ECC (régional), 5 VSS (IEEE-IFAC, international), 1 CDC-ECC (international), 1 SICE-ISCS (international), 5 AMCA (national)

Fernando Castaños and Dmitry Gromov.
Limit cycles in locally Hamiltonian systems with dissipation.
In *Proc. IFAC Workshop on Lagrangian and Hamiltonian Methods for Nonlinear Control*, pages 201 – 206, Berlin, Germany, November 2021

Fernando Castaños, Félix Miranda, and Alessio Franci.
A notion of equivalence for linear complementarity problems with application to the design of non-smooth bifurcations.
In *Proc. IFAC World Congress*, pages ID-1340, Berlin, July 2020

Oscar B. Cieza, Fernando Castaños, and Johann Regger.
Implicit IDA-PBC for underactuated mechanical systems : An LMI-based approach.
In *Proc. Conference on Decision and Control*, pages 7770 – 7775, Nice, France, December 2019

Gian Carlo Gómez-Cortés, Fernando Castaños, and Jorge Dávila.
Sliding motions on $SO(3)$, sliding subgroups.
In *Proc. Conference on Decision and Control*, pages 6954 – 6958, Nice, France, December 2019

Gian Carlo Gómez-Cortés, Fernando Castaños, and Jorge Dávila.
Control en la esfera S^2 usando modos deslizantes.
In *Congreso Nacional de Control Automático*, pages 778 – 784, Puebla, Mexico, October 2019

Pedro Flores-Palmeros, Pedro Castillo, and Fernando Castaños.
Backstepping-based controller for flight formation.
In *International Conference on Unmanned Aircraft Systems*, pages 254 – 260, Atlanta, GA, June 2019

Emanuel Rocha, Jaime A. Moreno, and Fernando Castaños.
Homogeneous generalisation of the Lur'e problem and the circle criterion.
In *Proc. IFAC Conf. on Modelling, Identification and Control of Nonlinear Systems*, pages 514 – 519, Guadalajara, Mexico, June 2018

Dmitry Gromov, Fernando Castaños, and Alexander L. Fradkov.
Projected dynamics of constrained Hamiltonian systems.
In *Proc. European Control Conference*, pages 1277 – 1281, Limassol, Cyprus, June 2018

Dmitry Gromov and Fernando Castaños.
Control of driftless systems using piecewise constant inputs.
In *Control Systems (SICE ISCS), 2018 International Symposium on*, pages 226 – 231, Tokyo, Japan, March 2018

Emanuel Rocha, Jaime A. Moreno, and Fernando Castaños.
Generalización homogénea del problema de Lur'e y del criterio del círculo.
In *Congreso Anual de la AMCA*, pages 96 – 101, Monterrey, Mexico, October 2017

Félix Miranda, Fernando Castaños, and Bernard Brogliato.
A set-valued nested sliding-mode controller.
In *Proc. IFAC World Congress*, pages 3026 – 3031, Toulouse, France, July 2017

Félix Miranda, Bernard Brogliato, and Fernando Castaños.
Set-valued discrete-time sliding-mode control of uncertain linear systems.
In *Proc. IFAC World Congress*, pages 10017 – 10022, Toulouse, France, July 2017

Dmitry Gromov and Fernando Castaños.
The geometric structure of interconnected thermo-mechanical systems.
In *Proc. IFAC World Congress*, pages 584 – 589, Toulouse, France, July 2017

Félix Miranda and Fernando Castaños.
Robust output regulation of linear passive systems using maximally monotone controls.
In *Proc. Conference on Decision and Control*, pages 6897 – 6902, Osaka, Japan, December 2015

Fernando Castaños and Alessio Franci.
The transition between tonic spiking and bursting in a six-transistor neuromorphic device.
In *Proc. Int. Conf. on Electrical Eng., Computing Science and Automatic Control*, pages 1 – 6, Mexico City, Mexico, December 2015

Andrea Aparicio Martínez, Fernando Castaños, and Leonid Fridman.
ISS properties of sliding-mode controllers for systems with matched and unmatched disturbances.
In *Proc. European Control Conference*, pages 2870–2875, Linz, Austria, July 2015

Fernando Castaños and Dmitry Gromov.
Interconnection and damping assignment for implicit port-Hamiltonian systems.
In *Proc. IFAC Conf. on Modelling, Identification and Control of Nonlinear Systems*, pages 1016 – 1021, Saint Petersburg, Russia, June 2015

Andrea Aparicio Martínez, Fernando Castaños, and Leonid Fridman.
ISS-Lyapunov functions for output feedback sliding modes.
In *Proc. Conference on Decision and Control*, pages 5536 – 5541, Los Angeles, California, USA, December 2014

Debbie Hernández-Zárate, Fernando Castaños, and Leonid Fridman.
Pole-placement in higher-order sliding-mode control.
In *Proc. IFAC World Congress*, pages 1386 – 1391, Cape Town, South Africa, August 2014

Félix Miranda and Fernando Castaños.
Robust output regulation of variable structure systems with multivalued controls.
In *Proc. Variable Structure Systems Workshop*, Nantes, Francia, June 2014

Andrea Aparicio Martínez, Fernando Castaños, and Leonid Fridman.
Dynamic surface for output feedback sliding modes, the case of relative degree two.
In *Proc. Conference on Decision and Control*, pages 3578 – 3583, Florence, Italy, December 2013

Andrea Aparicio Martínez and Fernando Castaños.
Control por modos deslizantes por retroalimentación de salida con grado relativo dos.
In *Congreso Anual de la AMCA*, pages 544 – 549, Ensenada, Mexico, October 2013

Edgar Estrada, Fernando Castaños, and Sabine Mondié.
 σ -estabilidad de sistemas de control basados en pasividad con retardos en la comunicación.
In *Congreso Anual de la AMCA*, pages 129 – 134, Ensenada, Mexico, October 2013

Cristian Kunusch and Fernando Castaños.
On the implementation of an adaptive extremum seeking algorithm for hydrogen minimization in PEM fuel cell based systems.
In *Proc. European Control Conference*, pages 2501 – 2506, Zürich, Switzerland, July 2013

Cristian Kunusch and Fernando Castaños.
Extremum seeking algorithms for minimal hydrogen consumption in PEM fuel cells.
In *Proc. American Control Conference*, pages 1146 – 1151, Washington, DC, USA, June 2013

Fernando Castaños, Debbie Hernández-Zárate, and Leonid Fridman.
Integral sliding-mode control for linear time-invariant implicit descriptions.
In *Proc. Conference on Decision and Control*, pages 6442 – 6447, Maui, Hawaii, December 2012

Matteo Rubagotti, Antonio Estrada, Fernando Castaños, Antonella Ferrara, and Leonid Fridman.
Optimal disturbance rejection by integral sliding mode control for systems in regular form.
In *Proc. Variable Structure Systems Workshop*, pages 78 – 82, Mexico City, Mexico, June 2010

Fernando Castaños and Romeo Ortega.
Energy-balancing passivity-based control is equivalent to dissipation and output invariance.
In *Proc. European Control Conference*, page WeC2.4, Budapest, Hungary, August 2009

Eugenii Shustin, Leonid Fridman, Emilia Fridman, and Fernando Castaños.
Robust semiglobal stabilization of the second order system by relay feedback with an uncertain variable time delay.
In *Proc. Conference on Decision and Control*, pages 2716 – 2721, Cancún, México, December 2008

Fernando Castaños, Romeo Ortega, Arjan J. van der Schaft, and Alessandro Astolfi.
Asymptotic stabilization via control by interconnection of port-Hamiltonian systems.
In *Congreso Latinoamericano de Control Automático*, Mérida, Venezuela, November 2008

Fernando Castaños, Bayu Jayawardhana, Romeo Ortega, and Eloísa García-Canseco.
A class of nonlinear RLC circuits globally stabilizable by proportional plus integral controllers.
In *Proc. IFAC World Congress*, pages 6202 – 6207, Seoul, Korea, June 2008

Romeo Ortega, Arjan J. van der Schaft, Fernando Castaños, and Alessandro Astolfi.
Control by (state-modulated) interconnection of port-Hamiltonian systems.
In *Proc. IFAC Symposium on Nonlinear Control Systems*, pages 47 – 54, Pretoria, South Africa, August 2007

Bayu Jayawardhana, Romeo Ortega, Eloísa García-Canseco, and Fernando Castaños.
Passivity of nonlinear incremental systems : Application to PI stabilization of nonlinear RLC circuits.
In *Proc. Conference on Decision and Control*, page ThIP2.17, San Diego, December 2006

Fernando Castaños and Leonid Fridman.
Design of integral sliding manifolds for multi-model uncertain systems via LMI.
In *Proc. Variable Structure Systems Workshop*, pages 63–67, Alghero, Italy, June 2006

Fernando Castaños and Leonid Fridman.
Robust design criteria for integral sliding surfaces.
In *Proc. Conference on Decision and Control, and European Control Conference*, pages 1976–1981, Seville, Spain, December 2005

Fernando Castaños and Leonid Fridman.
Integral sliding surface design using an \mathcal{H}_∞ criterion for decentralized control.
In *Proc. IFAC World Congress*, pages Th–A09–T0/2, Prague, July 2005

Fernando Castaños and Leonid Fridman.
Measurement sliding mode- \mathcal{H}_∞ control with application to decentralized systems.
In *Proc. Variable Structure Systems Workshop*, Vilanova i la Geltrú, Spain, September 2004

Leonid Fridman, Fernando Castaños, N. M'Sirdi, and Khraef.
Decomposition and robustness properties of integral sliding mode controllers.
In *Proc. Variable Structure Systems Workshop*, Vilanova i la Geltrú, Spain, September 2004

Fernando Castaños and Leonid Fridman.
Control descentralizado por modos deslizantes.
In *Congreso Anual de la AMCA*, pages 253–258, México, D.F., 2004

18 janvier 2022