



**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



**FRANCISCO JAVIER BEJARANO RODRIGUEZ**

## Datos Generales

**Nombre:** FRANCISCO JAVIER BEJARANO RODRIGUEZ

**Máximo nivel de estudios:**

**Antigüedad académica en la UNAM:** 2 años

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## Nombramientos

**Último:** PROFESOR ASIGNATURA A TP No Definitivo  
Facultad de Ingeniería  
Desde 01-11-2008 hasta 31-01-2011

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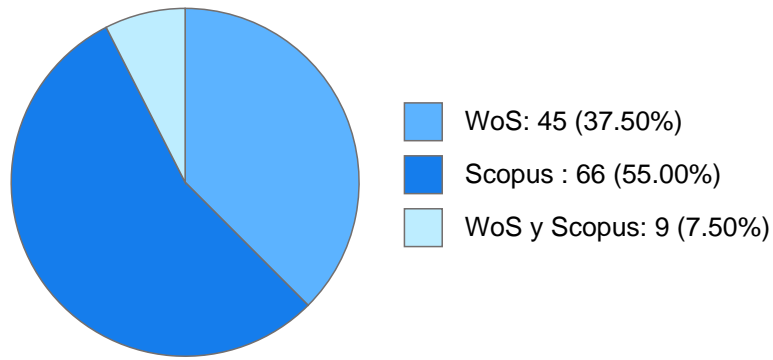
## Estímulos, programas, premios y reconocimientos

SNI I 2009 - 2023

**FRANCISCO JAVIER BEJARANO RODRIGUEZ**

**DOCUMENTOS EN REVISTAS**

**Histórico de Documentos**



#	Título	Autores	Revista	Año
1	Dissipative state observer design for nonlinear time-delay systems	JESUS DAVID AVILES VELAZQUEZ JAIME ALBERTO MORENO PEREZ FRANCISCO JAVIER BEJARANO RODRIGUEZ	JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS	2023
2	Zero dynamics normal form and disturbance decoupling of commensurate and distributed time-delay systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ	Automatica	2021
3	Continuous state observability and mode reconstructability of switched nonlinear systems with unknown switching function	FRANCISCO JAVIER BEJARANO RODRIGUEZ Mera M.	INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL	2021
4	On the strong observability in linear time-varying singular systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN et al.	Automatica	2019
5	Reconstructability of controlled switched linear systems: discrete and continuous states	FRANCISCO JAVIER BEJARANO RODRIGUEZ	International Journal of Dynamics and Control	2018

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6	A Decoupling Approach to Design Observers for Polytopic Takagi-Sugeno Models Subject to Unknown Inputs	JORGE ANGEL DAVILA MONTOYA FRANCISCO JAVIER BEJARANO RODRIGUEZ Rebai S.B. et al.	Proceedings of the American Control Conference	2018
7	On Necessary and Sufficient Conditions for Mode Observability of a Class of State Dependant Switched Systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ Mera M.	IFAC PAPERSONLINE	2017
8	Observer design for linear singular time-delay systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng, G.	Automatica	2017
9	Observability of singular systems with commensurate time-delays and neutral terms	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng G.	Automatica	2017
10	Unknown input functional observability of descriptor systems with neutral and distributed delay effects	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng G.	Automatica	2017
11	Interval observer for a class of uncertain nonlinear singular systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng, G. Efimov, D. et al.	Automatica	2016
12	A fault tolerant controller based on quasi-continuous high-order sliding mode technique	FRANCISCO JAVIER BEJARANO RODRIGUEZ Davila, J. Cieslak, J. et al.	Proceedings of the American Control Conference	2016
13	Observability of singular time-delay systems with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng G.	SYSTEMS & CONTROL LETTERS	2016
14	On the interval estimation for nonlinear singular system	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng G. Efimov D. et al.	IEEE Conference on Decision and Control	2016
15	Detectability of linear systems over a principal ideal domain with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ	SYSTEMS & CONTROL LETTERS	2015
16	Estimation of unknown inputs, with application to fault detection, via partial hierarchical observation	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	2007 European Control Conference, Ecc 2007	2015
17	Output stabilization of linear systems with disturbances	FRANCISCO JAVIER BEJARANO RODRIGUEZ Dávila J.	Mechanisms And Machine Science	2015
18	Functional unknown input reconstruction of descriptor systems: Application to fault detection	FRANCISCO JAVIER BEJARANO RODRIGUEZ	Automatica	2015

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19	Observation of Nonlinear Differential-Algebraic Systems with Unknown Inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Perruquetti W. Floquet T. et al.	IEEE TRANSACTIONS ON AUTOMATIC CONTROL	2015
20	Unknown input observer for linear time-delay systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng G. Perruquetti W. et al.	Automatica	2015
21	Observer design for linear systems with commensurate delays	FRANCISCO JAVIER BEJARANO RODRIGUEZ Yu L. Zheng G.	Proceedings of the 33rd Chinese Control Conference, CCC 2014	2015
22	Observability of linear systems with commensurate delays and unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng, Gang	Automatica	2014
23	Observer based on ISM	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	Systems And Control: Foundations And Applications	2014
24	Stewart platform	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	Systems And Control: Foundations And Applications	2014
25	Multimodel and ISM control	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	Systems And Control: Foundations And Applications	2014
26	Integral sliding mode control	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	Systems And Control: Foundations And Applications	2014
27	Multipplant and ISM output control	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	Systems And Control: Foundations And Applications	2014

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28	Magnetic bearing	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	Systems And Control: Foundations And Applications	2014
29	Observability and detectability of singular linear systems with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Floquet T. Perruquetti W. et al.	Automatica	2013
30	Unmatched uncertainties compensation based on high-order sliding mode observation	DOLORES ALEJANDRA FERREIRA DE LOZA FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN	INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL	2013
31	Robust fault diagnosis of disturbed linear systems via a sliding mode high order differentiator	FRANCISCO JAVIER BEJARANO RODRIGUEZ Figueroa, Maricela Pacheco, Jaime et al.	INTERNATIONAL JOURNAL OF CONTROL	2012
32	Geometric approach and structure at infinity controls for the disturbance rejection	FRANCISCO JAVIER BEJARANO RODRIGUEZ de Jesus Rubio, J. Figueroa, M. et al.	IET CONTROL THEORY AND APPLICATIONS	2012
33	State reconstruction of nonlinear differential-algebraic systems with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Perruquetti W. Floquet T. et al.	IEEE Conference on Decision and Control	2012
34	Partial unknown input reconstruction for linear systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ	Automatica	2011
35	Observability and detectability analysis of singular linear systems with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Floquet T. Perruquetti W. et al.	IEEE Conference on Decision and Control	2011
36	State exact reconstruction for switched linear systems via a super-twisting algorithm	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN	INTERNATIONAL JOURNAL OF SYSTEMS SCIENCE	2011
37	Switched Observers for Switched Linear Systems With Unknown Inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Pisano, Alessandro	IEEE TRANSACTIONS ON AUTOMATIC CONTROL	2011
38	Robust Control With Exact Uncertainties Compensation: With or Without Chattering?	DOLORES ALEJANDRA FERREIRA DE LOZA FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN	IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY	2011
39	Finite-time converging jump observer for switched linear systems with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Pisano, A. Usai, E.	NONLINEAR ANALYSIS-HYBRID SYSTEMS	2011

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40	Observability and observer design for hybrid multicell choppers	FRANCISCO JAVIER BEJARANO RODRIGUEZ Ghanes, M Barbot, JP	INTERNATIONAL JOURNAL OF CONTROL	2010
41	High order sliding mode observer for linear systems with unbounded unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN	INTERNATIONAL JOURNAL OF CONTROL	2010
42	UNKNOWN INPUT AND STATE ESTIMATION FOR UNOBSERVABLE SYSTEMS	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak, Alexander	SIAM JOURNAL ON CONTROL AND OPTIMIZATION	2009
43	Output Integral Sliding Mode for Min-Max Optimization of Multi-Plant Linear Uncertain Systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak, Alexander S.	IEEE TRANSACTIONS ON AUTOMATIC CONTROL	2009
44	On sliding mode and adaptive observers design for multicell converter	FRANCISCO JAVIER BEJARANO RODRIGUEZ Ghanes M. Barbot J.P.	Proceedings of the American Control Conference	2009
45	Robust output regulation with exact unmatched uncertainties compensation based on HOSM observation	DOLORES ALEJANDRA FERREIRA DE LOZA FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN	IEEE Conference on Decision and Control	2009
46	Unbounded unknown inputs estimation based on high-order sliding mode differentiator	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN	IEEE Conference on Decision and Control	2009
47	Exact observer for switching linear systems via super-twisting algorithm	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN	IFAC Proceedings Volumes (IFAC-PapersOnline)	2009
48	Finite-time converging jump observer for linear switched systems with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ Pisano A. Usai E.	IFAC Proceedings Volumes (IFAC-PapersOnline)	2009
49	Second order sliding mode and adaptive observers for a chaotic system: A comparative study	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Ghanes M. et al.	IFAC Proceedings Volumes (IFAC-PapersOnline)	2008
50	Global hierarchical observer for linear systems with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Pisano A.	IEEE Conference on Decision and Control	2008

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51	Hierarchical observer for strongly detectable systems via second order sliding mode	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	IEEE Conference 2007 on Decision and Control
52	Output hierarchical super twisting observation based robust feedback control: With or without chattering?	DOLORES ALEJANDRA FERREIRA DE LOZA FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN	IEEE Conference 2007 on Decision and Control
53	Min-max output integral sliding mode control for multiplant linear uncertain systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	Proceedings of 2007 the American Control Conference
54	Numerical method for weights adjustment in minimax multi-model LQ-control	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	OPTIMAL 2007 CONTROL APPLICATIONS & METHODS
55	Hierarchical second-order sliding-mode observer for linear time invariant systems with unknown inputs	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	INTERNATIONAL 2007 JOURNAL OF SYSTEMS SCIENCE
56	Exact state estimation for linear systems with unknown inputs based on hierarchical super-twisting algorithm	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	INTERNATIONAL 2007 JOURNAL OF ROBUST AND NONLINEAR CONTROL
57	Output integral sliding mode control based on algebraic hierarchical observer	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	INTERNATIONAL 2007 JOURNAL OF CONTROL
58	Output integral sliding mode with application to the LQ - Optimal control	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	Proceedings Of 2006 The 2006 International Workshop On Variable Structure Systems, Vss'06
59	Hierarchical second-order sliding-mode observer for linear systems with unknown inputs	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	IEEE Conference 2006 on Decision and Control
60	Sliding mode multimodel control	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A. et al.	LECT NOTES 2006 CONTR INF





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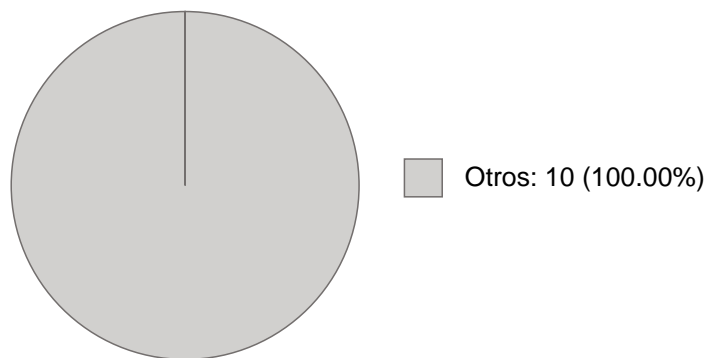
61	Decomposition of the min-max multi-model problem via integral sliding mode	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL	2005
62	Mini-max integral sliding-mode control for multimodel linear uncertain systems	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	IEEE TRANSACTIONS ON AUTOMATIC CONTROL	2004
63	Decomposition of the mini-max multimodel optimal problem via integral sliding mode control	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	Proceedings of the American Control Conference	2004
64	Mini-Max Integral Sliding Mode Control for Multimodel Linear Uncertain Systems	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Poznyak A.	IEEE Conference on Decision and Control	2003
65	On mode reconstructability and reconstructability sets of piecewise linear systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ Mera M.	INTERNATIONAL JOURNAL OF CONTROL	
66	Robust Luenberger-like observer for control of linear switched systems under arbitrary unknown switched function	FRANCISCO JAVIER BEJARANO RODRIGUEZ Mera M.	ASIAN JOURNAL OF CONTROL	



**FRANCISCO JAVIER BEJARANO RODRIGUEZ**

**LIBROS Y CAPITULOS CON ISBN**

**Obras con registro ISBN**



#	Título	Autores	Alcance	Año	ISBN
1	State and mode estimation for piecewise linear systems	HECTOR RIOS BARAJAS FRANCISCO JAVIER BEJARANO RODRIGUEZ Mera M.	Conferenc e Paper	2019	9783907144008
2	On the observability and detectability of non-commensurate time-delay linear systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ Ushirobira R. Zheng G.	Conferenc e Paper	2019	9783907144008
3	Luenberger-like observer for linear singular system with commensurate delay	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng G. Li S.	Conferenc e Paper	2018	9781509028733
4	Observability analysis of linear singular time-delay systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng G. Li S.	Conferenc e Paper	2018	9781509028733
5	Unknown input functional observability of descriptor systems with delays	FRANCISCO JAVIER BEJARANO RODRIGUEZ Zheng, G.	Conferenc e Paper	2016	9781509018376
6	Sliding Modes and Equivalent Control Concept	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Alexander Poznyak	Article	2014	9780817649623
7	Robust Output LQ Optimal Control via Integral Sliding Modes Introduction	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Alexander Poznyak	Editorial Material	2014	9780817649623



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8	Robust Output LQ Optimal Control via Integral Sliding Modes Preface	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Alexander Poznyak	Editorial Material	2014	9780817649623
9	Min-Max Multimodel LQ Control	LEONID FRIDMAN FRANCISCO JAVIER BEJARANO RODRIGUEZ Alexander Poznyak	Article	2014	9780817649623
10	Observer for linear time invariant systems with unknown inputs based on the hierarchical super-twisting concept	FRANCISCO JAVIER BEJARANO RODRIGUEZ LEONID FRIDMAN Poznyak A.	Conferenc e Paper	2006	1424402085



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**FRANCISCO JAVIER BEJARANO RODRIGUEZ**

**PARTICIPACIÓN EN PROYECTOS**

**No se encuentran registros en la base de datos de SISEPRO asociados a:**

**FRANCISCO JAVIER BEJARANO RODRIGUEZ**



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**FRANCISCO JAVIER BEJARANO RODRIGUEZ**

**PARTICIPACIÓN EN TESIS**

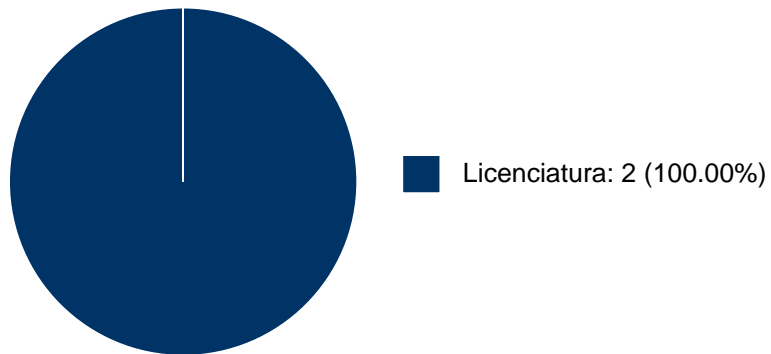
**No se encuentran registros en la base de datos de TESIUNAM asociados a:**

**FRANCISCO JAVIER BEJARANO RODRIGUEZ**

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**DOCENCIA IMPARTIDA**

**Histórico de docencia**



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Licenciatura	CONTROL AUTOMATICO	Facultad de Ingeniería	6	2010-1
2	Licenciatura	CONTROL AUTOMATICO	Facultad de Ingeniería	18	2009-2



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**FRANCISCO JAVIER BEJARANO RODRIGUEZ**

**PATENTES**

**No se encuentran registros en la base de datos de patentes asociados a:**

**FRANCISCO JAVIER BEJARANO RODRIGUEZ**

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**FUENTES DE INFORMACIÓN**

**Internos**

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2024
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

**Externos**

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024