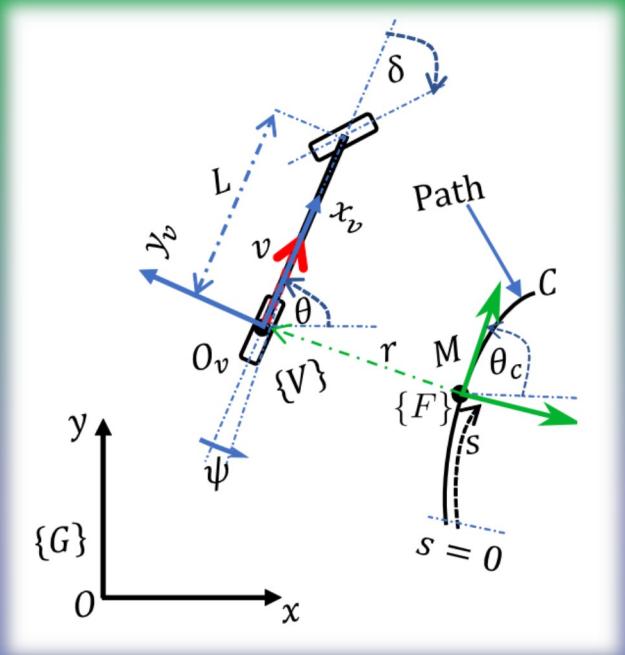


PUBLICATIONS CONTENT DIGEST



CSS Publications Activities

Vice-President

ANDREW ALLEYNE *University of Illinois at Urbana-Champaign*

<http://ieeecs.org/publications>

Journal Editors

IEEE Transactions on Automatic Control

ALESSANDRO ASTOLFI *Imperial College London and University of Rome “Tor Vergata”*

<http://ieeecs.org/publication/transactions-automatic-control>

IEEE Transactions on Control Systems Technology

ANDREA SERRANI *Ohio State University*

<http://ieeecs.org/publication/transactions-control-systems-technology>

IEEE Transactions on Control of Network Systems

JEFF SHAMMA *University of Illinois at Urbana-Champaign*

ANNA SCAGLIONE Deputy Editor-in-Chief *Arizona State University*

<http://ieeecs.org/publication/transactions-control-network-systems>

IEEE Control Systems Letters

MARIA ELENA VALCHER *University of Padua*

<http://ieeecs.org/publication/control-systems-letters>

IEEE Control Systems Magazine

RODOLPHE SEPULCHRE *University of Cambridge*

<http://ieeecs.org/publication/ieee-control-systems-magazine>

Electronics Editor

E-letter on Systems, Control and Signal Processing

AHMAD TAHA *University of Texas at San Antonio*

<http://ieeecs.org/publication/e-letter>

***Submission and editorial instructions can be found on each publication's homepage**

For subscription to the monthly E-Letter, please send an empty email to

eletter-css-join@lists.it.utsa.edu

IEEE TRANSACTIONS ON AUTOMATIC CONTROL

A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY



NOVEMBER 2021

VOLUME 66

NUMBER 11

IETAA9

(ISSN 0018-9286)

REGULAR PAPERS

Constrained Online Convex Optimization With Feedback Delays	X. Cao, J. Zhang, and H. V. Poor	5049
Online Learning Over Dynamic Graphs via Distributed Proximal Gradient Algorithm	R. Dixit, A. S. Bedi, and K. Rajawat	5065
Coordinated Online Learning for Multiagent Systems With Coupled Constraints and Perturbed Utility Observations	E. Tampubolon and H. Boche	5080
New Results on the Local Linear Convergence of ADMM: A Joint Approach	T. Erseghe	5096
Distributed Control Design for Heterogeneous Interconnected Systems	Y. R. Stürz, A. Eichler, and R. S. Smith	5112
Invariance Principles and Observability in Switched Systems With an Application in Consensus	T.-C. Lee, Y. Tan, Y. Su, and I. Mareels	5128
Recursive Filtering With Measurement Fading: A Multiple Description Coding Scheme	L. Wang, Z. Wang, B. Shen, and G. Wei	5144
A Nonsmooth Approach to Controller Synthesis for Boolean Specifications	P. Glotfelter, J. Cortés, and M. Egerstedt	5160
Distributed Nonconvex Optimization of Multiagent Systems Using Boosting Functions to Escape Local Optima	S. Welikala and C. G. Cassandras	5175
Control Theory Meets POMDPs: A Hybrid Systems Approach	M. Ahmadi, N. Jansen, B. Wu, and U. Topcu	5191
Modularity in Design of Dynamical Network Systems: Retrofit Control Approach	T. Ishizaki, H. Sasahara, M. Inoue, T. Kawaguchi, and J. -i Imura	5205
Indefinite Linear Quadratic Mean Field Social Control Problems With Multiplicative Noise	B.-C. Wang and H. Zhang	5221
A Local Direct Method for Module Identification in Dynamic Networks With Correlated Noise	K. R. Ramaswamy and P. M. J. Van den Hof	5237
Path to Stochastic Stability: Comparative Analysis of Stochastic Learning Dynamics in Games	H. Jaleel and J. S. Shamma	5253
Supervisory Control of Fair Discrete-Event Systems: A Canonical Temporal Logic Foundation	K. T. Seow	5269
Learning Optimal Controllers for Linear Systems With Multiplicative Noise via Policy Gradient	B. Gravell, P. M. Esfahani, and T. Summers	5283
Privatized Distributed Anomaly Detection for Large-Scale Nonlinear Uncertain Systems	V. Rostampour, R. M.G. Ferrari, A. M.H. Teixeira, and T. Keviczky	5299
Network Structure Identification From Corrupt Data Streams	V. R. Subramanian, A. Lamperski, and M. V. Salapaka	5314
Closed-Loop Deadlock-Free Supervision for GMECs in Time Petri Net Systems	L. Li, F. Basile, and Z. Li	5326
Geometric Convergence of Gradient Play Algorithms for Distributed Nash Equilibrium Seeking	T. Tatarenko, W. Shi, and A. Nedić	5342

TECHNICAL NOTES

Distributed Observers With Time-Varying Delays	H. Silm, R. Ushirobira, D. Efimov, E. Fridman, J.-P. Richard, and W. Michiels	5354
--	---	------

(Contents Continued on Back Cover)



(Contents Continued from Front Cover)

A General Class of Control Lyapunov Functions and Sampled-Data Stabilization	<i>K. Chrysafis and J. Tsinias</i>	5362
Sparse False Injection Attacks Reconstruction via Descriptor Sliding Mode Observers	<i>R. Ma, P. Shi, and L. Wu</i>	5369
Linear-Convex Optimal Steady-State Control	<i>L. S. P. Lawrence, J. W. Simpson-Porco, and E. Mallada</i>	5377
Definition of State-in-Mode Participation Factors for Modal Analysis of Linear Systems	<i>A. B. Iskakov</i>	5385
Almost Sure Contraction for Stochastic Switched Impulsive Systems	<i>B. Liu, B. Xu, and T. Liu</i>	5393
On the Derivation of Stability Properties for Time-Delay Systems Without Constraint on the Time-Derivative of the Initial Condition	<i>H. Lhachemi and R. Shorten</i>	5401
Interval Impulsive Observer for Linear Systems With Aperiodic Discrete Measurements	<i>D. Rabehi, N. Meslem, A. El Amraoui, and N. Ramdani</i>	5407
Escort Function Definitions for Feasible Region Flexibility in Applications of Replicatorlike Dynamics With Constraints	<i>A. Ovalle, A. Hably, and S. Bacha</i>	5414
Small-Time Local Controllability of Switched Nonlinear Systems	<i>Q. Meng, H. Yang, and B. Jiang</i>	5422
Stabilization of a Class of Underactuated Nonlinear Systems via Underactuated Back-Stepping	<i>J. Jiang and A. Astolfi</i>	5429
Relevance of Network Characteristics to Controllability Degree	<i>B. Hou</i>	5436
Adaptive Internal Model Theory of the Oculomotor System and the Cerebellum	<i>M. E. Broucke</i>	5444
Continuous-Time Discounted Mirror Descent Dynamics in Monotone Concave Games	<i>B. Gao and L. Pavel</i>	5451
Robust Adaptive Stabilization by Delay Under State Parametric Uncertainty and Measurement Bias	<i>J. Wang, S. Aranovskiy, E. Fridman, D. Sokolov, D. Efimov, and A. A. Bobtsov</i>	5459
A Distributed Forward–Backward Algorithm for Stochastic Generalized Nash Equilibrium Seeking	<i>B. Franci and S. Grammatico</i>	5467
Output Regulation of Invertible Nonlinear Systems via Robust Dynamic Feedback-Linearization	<i>Y. Wu, A. Isidori, and R. Lu</i>	5474
Adaptive Controller and Observer Design Using Open and Closed-Loop Reference Models for Linear Time-Invariant Systems With Unknown Dynamics	<i>S. J. Ohrem and C. Holden</i>	5482
An Analytical Safe Approximation to Joint Chance-Constrained Programming With Additive Gaussian Noises	<i>N. Li, I. Kolmanovsky, and A. Girard</i>	5490
Indirect Adaptive MPC for Discrete-Time LTI Systems With Parametric Uncertainties	<i>A. Dhar and S. Bhasin</i>	5498
Joint Scheduling of Deferrable Demand and Storage With Random Supply and Processing Rate Limits	<i>J. Jin, L. Hao, Y. Xu, J. Wu, and Q.-S. Jia</i>	5506
An Iterative Data-Driven Linear Quadratic Method to Solve Nonlinear Discrete-Time Tracking Problems	<i>C. Possieri, G. P. Incremona, G. C. Calafiori, and A. Ferrara</i>	5514
Risk-Averse Allocation Indices for Multiarmed Bandit Problem	<i>M. Malekipirbazari and Ö. Çavuş</i>	5522
On Inf-Convolution-Based Robust Practical Stabilization Under Computational Uncertainty	<i>P. Schmidt, P. Osinenko, and S. Streif</i>	5530
On the Approximation of Moments for Nonlinear Systems	<i>N. Faedo, G. Scarciotti, A. Astolfi, and J. V. Ringwood</i>	5538
Delayed Disturbance Attenuation via Measurement Noise Estimation	<i>I. Furtat and E. Fridman</i>	5546
Optimal Decentralized Control for Uncertain Systems by Symmetric Gauss–Seidel Semi-Proximal ALM	<i>J. Ma, Z. Cheng, X. Zhang, M. Tomizuka, and T. H. Lee</i>	5554
Leader-Following Consensus for Multiple Euler–Lagrange Systems by Distributed Position Feedback Control	<i>C. He and J. Huang</i>	5561
Angle-Based Analysis Approach for Distributed Constrained Optimization	<i>P. Lin, J. Xu, W. Ren, C. Yang, and W. Gui</i>	5569
Componentwise Hölder Inference for Robust Learning-Based MPC	<i>J. M. Manzano, D. M. de la Peña, J.-P. Calliess, and D. Limon</i>	5577
Data-Driven Fault-Tolerant Control for Attitude Synchronization of Nonlinear Quadrotors	<i>W. Zhao, H. Liu, and F. L. Lewis</i>	5584
Robust Gain-Scheduled Estimation With Dynamic D-Scalings	<i>T. Holicki and C. W. Scherer</i>	5592
Velocity-Free Event-Triggered Control for Multiple Euler–Lagrange Systems With Communication Time Delays	<i>B. Wei, F. Xiao, F. Fang, and Y. Shi</i>	5599
Stabilization of Aperiodic Sampled-Data Boolean Control Networks: A Delay Approach	<i>L. Sun, W.-K. Ching, and J. Lu</i>	5606
Cooperative Adaptive Containment Control With Parameter Convergence via Cooperative Finite-Time Excitation	<i>C. Yuan, P. Stegagno, H. He, and W. Ren</i>	5612

IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY



A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY

NOVEMBER 2021

VOLUME 29

NUMBER 6

IETTE2

(ISSN 1063-6536)

REGULAR PAPERS

Multi-Agent Formation Tracking for Autonomous Surface Vehicles	2287
..... <i>R. Ringbäck, J. Wei, E. S. Erstorp, J. Kuttenkeuler, T. A. Johansen, and K. H. Johansson</i>	
Pause-and-Go Self-Balancing Formation Control of Autonomous Vehicles Using Vision and Ultrasound Sensors	2299
..... <i>V. Mwaffo, J. S. Curry, F. L. Iudice, and P. De Lellis</i>	
An Adaptive Observer-Based Controller Design for Active Damping of a DC Network With a Constant Power Load	2312
..... <i>J. E. Machado, R. Ortega, A. Astolfi, J. Arocás-Pérez, A. Pyrkin, A. A. Bobtsov, and R. Griñó</i>	
Controlled Direct Liquid Cooling of Data Servers	2325
..... <i>R. Lucchese, D. Varagnolo, and A. Johansson</i>	
Eco-Cooling Control Strategy for Automotive Air-Conditioning System: Design and Experimental Validation	2339
..... <i>H. Wang, M. R. Amini, Q. Hu, I. Kolmanovsky, and J. Sun</i>	
Offset-Free Model Predictive Temperature Control for Ultrasound-Based Hyperthermia Cancer Treatments	2351
..... <i>D. A. Deenen, B. Maljaars, L. C. Sebeke, B. de Jager, E. Heijman, H. Grüll, and W. P. M. H. Heemels</i>	
Dynamic Model Reduction and Predictive Control of Hot-Melt Extrusion Applied to Drug Manufacturing	2366
..... <i>J. Grimard, L. Dewasme, and A. Vande Wouwer</i>	
Hierarchical Control in Islanded DC Microgrids With Flexible Structures	2379
..... <i>P. Nahata, A. La Bella, R. Scattolini, and G. Ferrari-Trecate</i>	
A Structural Property of Charging Scheduling Policy for Shared Electric Vehicles With Wind Power Generation	2393
..... <i>Q.-S. Jia and J. Wu</i>	
High Precision Over Long Range: A Macro–Micro Approach to Quantized Positioning Systems	2406
..... <i>A. T. Salton, M. Fu, J. V. Flores, and J. Zheng</i>	
State Estimation for Multirate Measurements in the Presence of Integral Term and Variable Delay	2416
..... <i>R. Han, Y. Salehi, B. Huang, and V. Prasad</i>	
Reference-Tracking Control Policies for Packetized Coordination of Heterogeneous DER Populations	2427
..... <i>L. A. Duffaut Espinosa, A. Khurram, and M. Almassalkhi</i>	
Model Predictive Path-Following Control of Snake Robots Using an Averaged Model	2444
..... <i>H. Fukushima, T. Yanagiya, Y. Ota, M. Katsumoto, and F. Matsuno</i>	

(Contents Continued on Back Cover)



(Contents Continued from Front Cover)

Rigid-Profile Input Scheduling Under Constrained Dynamics With a Water Network Application	A. Lang, M. Cantoni, F. Farokhi, and I. Shames	2457
Provably Safe and Scalable Multivehicle Trajectory Planning	S. Bansal, M. Chen, K. Tanabe, and C. J. Tomlin	2473
Model-Based Resonance Tracking of Linear Systems	T. Vasileiou	2490
Formation Control of Stochastic Multivehicle Systems	V. Mwaffo, P. DeLellis, and J. S. Humbert	2505
Layer-to-Layer Stability of Linear Layerwise Spatially Varying Systems: Applications in Fused Deposition Modeling	E. C. Balta, D. M. Tilbury, and K. Barton	2517
Nonlinear Energy-Maximizing Optimal Control of Wave Energy Systems: A Moment-Based Approach	N. Faedo, G. Scarciootti, A. Astolfi, and J. V. Ringwood	2533
Energy Management Strategy for Plug-in-Hybrid Electric Vehicles Based on Predictive PMP	R. Schmid, J. Buerger, and N. Bajcinca	2548
Multilane Automated Driving With Optimal Control and Mixed-Integer Programming ...	R. A. Dollar and A. Vahidi	2561
Piecewise Linear Path Following for a Unicycle Using Transverse Feedback Linearization	R. S. D'Souza, R. Louwers, and C. Nielsen	2575
Distributed Control of Multizone HVAC Systems Considering Indoor Air Quality	Y. Yang, S. Srinivasan, G. Hu, and C. J. Spanos	2586
Iterative Learning Operation Control of High-Speed Trains With Adhesion Dynamics	D. Huang, W. Yang, T. Huang, N. Qin, Y. Chen, and Y. Tan	2598
Experimental Implementation and Validation of a Broadband LTI Energy-Maximizing Control Strategy for the Wavestar Device	D. García-Violini, Y. Peña-Sánchez, N. Faedo, C. Windt, F. Ferri, and J. V. Ringwood	2609
<hr/>		
BRIEF PAPERS		
A Geometric Approach to Fault Detection and Isolation in a Grid-Connected Inverter	A. Mashreghi and M. Namvar	2622
Antisway Control of a Multirotor With Cable-Suspended Payload	S. Lee and H. Son	2630
Speed Control of Permanent Magnet Synchronous Motor With Uncertain Parameters and Unknown Disturbance	A. A. Alfehaid, E. G. Strangas, and H. K. Khalil	2639
Full- and Reduced-Order Observers for Image-Based Depth Estimation Using Concurrent Learning	G. Rotithor, D. Trombetta, R. Kamalapurkar, and A. P. Dani	2647
Fixed-Dynamics Antiwindup Design: Application to Pitch-Limited Position Control of Multirotor Unmanned Aerial Vehicles	P. Ghignoni, D. Invernizzi, and M. Lovera	2654
Robust PIDD2 Controller Design for Perturbed Load Frequency Control of an Interconnected Time-Delayed Power Systems	M. Kumar and Y. V. Hote	2662
Platooning of Car-Like Vehicles in Urban Environments: Longitudinal Control Considering Actuator Dynamics, Time Delays, and Limited Communication Capabilities	A. Khalifa, O. Kermorgant, S. Dominguez, and P. Martinet	2670
Overcoming the Detectability Obstacle in Adaptive Output Feedback Control of DC–DC Boost Converter With Unknown Load	M. Tavan, K. Sabahi, A. Hajizadeh, M. N. Soltani, and K. Jessen	2678
Adaptive Estimation of Play Radii for a Prandtl–Ishlinskii Hysteresis Operator	M. Al Janaideh, R. Xu, and X. Tan	2687
Dynamic Soft Sensor Modeling for Time Sequence Data Based on Convolution Filters	W. Xiong and W. Sun	2696
Output-Feedback Sliding-Mode Controller for Blood Glucose Regulation in Critically Ill Patients Affected by Type 1 Diabetes	R. Franco, A. Ferreira de Loza, H. Ríos, L. Cassany, D. Gucik-Derigny, J. Cieslak, D. Henry, and L. Olçomendy	2704
Performance Degradation Monitoring and Recovery of Vision-Based Control Systems	Y. Xu, S. Yin, S. X. Ding, H. Luo, and Z. Zhao	2712
Interior Point Differential Dynamic Programming	A. Pavlov, I. Shames, and C. Manzie	2720
A Testable Robust Stability Framework for the Variable Impedance Control of 1-DOF Exoskeleton With Variable Stiffness Actuator	L. Liu, B. J. E. Misgeld, A. Pomprapa, and S. Leonhardt	2728
Distributed Formation Control for Multiagent Systems Using a Fractional-Order Proportional–Integral Structure	R. Cajo, M. Guinaldo, E. Fabregas, S. Dormido, D. Plaza, R. De Keyser, and C. Ionescu	2738
<hr/>		
COMMENTS AND CORRECTIONS		
Corrections to “Output-Feedback Sliding-Mode Controller for Blood Glucose Regulation in Critically Ill Patients Affected by Type 1 Diabetes” R. Franco, A. Ferreira de Loza, H. Ríos, L. Cassany, D. Gucik-Derigny, J. Cieslak, L. Olçomendy, and D. Henry	2746

IEEE CONTROL SYSTEMS LETTERS

A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY



NOVEMBER 2021

VOLUME 5

NUMBER 5

ICSLBO

(ISSN 2475-1456)

PAPERS

Automatic Glucose Control During Meals and Exercise in Type 1 Diabetes: Proof-of-Concept in Silico Tests Using a Switched LPV Approach	<i>P. H. Colmegna, F. D. Bianchi, and R. S. Sánchez-Peña</i>	1489
New Necessary and Sufficient Conditions for Decentralized H_∞ Control of Discrete-Time Interconnected Systems	<i>T. Yu and J. Xiong</i>	1495
Solving Eco-Driving Problems Using Indirect Collocation Method and Smooth Representation	<i>D. Shen, D. Karbowski, and A. Rousseau</i>	1501
Distributed Mirror Descent With Integral Feedback: Asymptotic Convergence Analysis of Continuous-Time Dynamics	<i>Y. Sun and S. Shahrampour</i>	1507
Novel Bounds on the Probability of Misclassification in Majority Voting: Leveraging the Majority Size	<i>A. T. J. R. Cobbenhagen, A. Carè, M. C. Campi, F. A. Ramponi, D. J. Antunes, and W. P. M. H. Heemels</i>	1513
On Moment Estimation From Polynomial Chaos Expansion Models	<i>T. Lefebvre</i>	1519
Task Space Consensus of Heterogeneous Robots With Time-Delays and Without Velocity Measurements	<i>C. I. Aldana, L. Tabarez, E. Nuño, and N. E. Cruz-Zavala</i>	1525
Near-Optimal Moving Average Estimation at Characteristic Timescales: An Allan Variance Approach	<i>H. Haeri, C. E. Beal, and K. Jerath</i>	1531
Safety-Critical Control of Compartmental Epidemiological Models With Measurement Delays	<i>T. G. Molnár, A. W. Singletary, G. Orosz, and A. D. Ames</i>	1537
Mesh-Based Piecewise Affine Abstraction With Polytopic Partitions for Nonlinear Systems	<i>Z. Jin, Qiang Shen, and S. Z. Yong</i>	1543
Emulation-Based Dynamic Output-Feedback Control of Saturating Discrete-Time LPV Systems	<i>C. D. Souza, V. J. S. Leite, S. Tarbouriech, and E. B. Castelan</i>	1549
Mediating Ribosomal Competition by Splitting Pools	<i>J. Miller, M. A. Al-Radhawi, and E. D. Sontag</i>	1555
Input-Output Admissibility Analysis of Continuous Descriptor System With Time-Varying Delay	<i>E. A. Hicham, K. A. Barbosa, and C. Rodriguez</i>	1561
Leader-Following Consensus of Second-Order Multi-Agent Systems With Switching Topology and Partial Aperiodic Sampled Data	<i>S. A. Ajwad, E. Moulay, M. Defoort, T. Ménard, and P. Coirault</i>	1567

(Contents Continued on Page ii)



Cooperative Salvo Based Active Aircraft Defense Using Impact Time Guidance	A. Sinha, S. R. Kumar, and D. Mukherjee	1573
Data-Driven Linear Parameter-Varying Model Identification Using Transfer Learning	Y. Bao and J. M. Velni	1579
Approximate Differentiator With Varying Bandwidth for Control Tracking Applications	R. H. Jaafar and S. S. Saab	1585
Private Aggregation With Application to Distributed Optimization	K. Tjell and R. Wisniewski	1591
An Efficient Algorithm to Compute Norms for Finite Horizon, Linear Time-Varying Systems	J. Buch, M. Arcak, and P. Seiler	1597
Heterogeneous Explore-Exploit Strategies on Multi-Star Networks	U. Madhushani and N. E. Leonard	1603
Line-Independent Plug-and-Play Voltage Stabilization and \mathcal{L}_2 Gain Performance of DC Microgrids	M. S. Sadabadi	1609
On Distributed Model-Free Reinforcement Learning Control With Stability Guarantee	S. Mukherjee and T. L. Vu	1615
Observer-Based Sensor Fault Detection in a Dark Fermenter for Hydrogen Production	J. Torres and J. D. Avilés	1621
Joint State and Dynamics Estimation With High-Gain Observers and Gaussian Process Models	M. Buisson-Fenet, V. Morgenthaler, S. Trimpe, and F. D. Meglio	1627
Stochastic Model Predictive Control Using Simplified Affine Disturbance Feedback for Chance-Constrained Systems	J. Zhang and T. Ohtsuka	1633
Model-Free Self-Triggered Control Co-Design for Probabilistic Boolean Control Networks	A. Acerne, A. Yerudkar, L. Glielmo, and C. D. Vecchio	1639
A New Approach to Mean Square Exponential Stability of Stochastic Functional Differential Equations	P. H. A. Ngoc	1645
Human Motion Prediction Using Adaptable Recurrent Neural Networks and Inverse Kinematics	R. Liu and C. Liu	1651
Electrode-Level State Estimation in Lithium-Ion Batteries via Kalman Decomposition	D. Zhang, L. D. Couto, and S. J. Moura	1657
Constrained Rigid Body Attitude Stabilization: An Anti-Windup Approach	M. C. Turner and C. M. Richards	1663
Glycemic Control Strategy Based on an Impulsive MPC With Safety Layer Coupling for IOB Limitation	M. F. Villa-Tamayo, F. León-Vargas, M. García-Jaramillo, and P. S. Rivadeneira	1669
Trend-Based Repair Quality Assessment for Industrial Rotating Equipment	M. Toothman, B. Braun, S. J. Bury, M. Dessauer, K. Henderson, R. Wright, D. M. Tilbury, J. Moyne, and K. Barton	1675
A Closed-Form Solution to Estimate Spatially Varying Parameters in Heat and Mass Transport	R. J. R. V. Kampen, A. Das, S. Weiland, and M. V. Berkel	1681
On Data-Driven Multi-Product Pricing	T. Wang, C. Wu, and W. Qi	1687
Non-Asymptotic Identification of Linear Dynamical Systems Using Multiple Trajectories	Y. Zheng and N. Li	1693
Balanced Reduced-Order Models for Iterative Nonlinear Control of Large-Scale Systems	Y. Huang and B. Kramer	1699
Tumor Reduction Using Oncolytic Viruses Under an Impulsive Nonlinear Estimation and Predictive Control Scheme	M. F. Villa-Tamayo, A. J. N. Anelone, and P. S. Rivadeneira	1705
Optimal Task-Invariant Energetic Control for a Knee-Ankle Exoskeleton	J. Lin, N. V. Divekar, G. Lv, and R. D. Gregg	1711
Biologically-Inspired Impedance Control With Hysteretic Damping	N. Brissonneau, B. He, G. C. Thomas, and L. Sentis	1717
Network-Cognizant Time-Coupled Aggregate Flexibility of Distribution Systems Under Uncertainties	B. Cui, A. Zamzam, and A. Bernstein	1723
Consistency of Distributionally Robust Risk- and Chance-Constrained Optimization Under Wasserstein Ambiguity Sets	A. Cherukuri and A. R. Hota	1729
Design and Implementation of a Wind Farm Controller Using Aerodynamics Estimated From LIDAR Scans of Wind Turbine Blades	A. Stock, L. Amos, R. Alves, and W. Leithead	1735

Accurate Reduced-Order Models for Heterogeneous Coherent Generators	H. Min, F. Paganini, and E. Mallada	1741
On the Observability and Controllability of Large-Scale IoT Networks: Reducing Number of Unmatched Nodes via Link Addition	M. Doostmohammadian and H. R. Rabiee	1747
Computing Worst-Case Disturbances for Finite-Horizon Linear Time-Varying Approximations of Uncertain Systems	K. S. Schweidel, J. R. Buch, P. J. Seiler, and M. Arcak	1753
Random-Sampling Monte-Carlo Tree Search Methods for Cost Approximation in Long-Horizon Optimal Control	S. Ragi and H. D. Mittelmann	1759
Formal Multi-Objective Synthesis of Continuous-State MDPs	S. Haesaert, P. Nilsson, and S. Soudjani	1765
On the Semi-Global Stability of an EK-Like Filter	P. Bernard, N. Mimmo, and L. Marconi	1771
Computationally Tractable Stability Criteria for Exogenously Switched Model Predictive Control	R. A. Hall and L. J. Bridgeman	1777
Game-Theoretic Approach to a Decision-Making Problem for Blockchain Mining	K. Toda, N. Kuze, and T. Ushio	1783
Constraint Enforcement via Tube-Based MPC Exploiting Switching Restrictions	R. Lavaei, R. Hall, C. Danielson, and L. Bridgeman	1789
Data-Driven Koopman Controller Synthesis Based on the Extended \mathcal{H}_2 Norm Characterization	D. Uchida, A. Yamashita, and H. Asama	1795
UAV State and Parameter Estimation in Wind Using Calibration Trajectories Optimized for Observability ...	A. Shastry and D. A. Paley	1801
LPV Controller Design for Diesel Engine SCR Aftertreatment Systems Based on Quasi-LPV Models	J. Lim, P. Kirchen, and R. Nagamune	1807
Optimal Spacecraft Guidance With Asynchronous Measurements and Noisy Impulsive Controls	E. L. Jenson, X. Chen, and D. J. Scheeres	1813
Periodic Behaviors and Graceful Transitions Between Them for Bimodal Systems: Example of a Jumper on a Trampoline	V. Murali and E. I. Verriest	1819
Neural Stochastic Contraction Metrics for Learning-Based Control and Estimation	H. Tsukamoto, S.-J. Chung, and J.-J. E. Slotine	1825
Risk-Bounded Control Using Stochastic Barrier Functions	S. Yaghoubi, K. Majd, G. Fainekos, T. Yamaguchi, D. Prokhorov, and B. Hoxha	1831
Closed-Loop Reference Model Based Distributed Model Reference Adaptive Control for Multi-Agent Systems	R. Goel and S. B. Roy	1837
A Data-Driven Method for Computing Polyhedral Invariant Sets of Black-Box Switched Linear Systems	Z. Wang and R. E. M. Jungers	1843
Optimal Tolling for Multitype Mixed Autonomous Traffic Networks	D. A. Lazar and R. Pedarsani	1849

UPCOMING CONFERENCES



Conference on Decision and Control **CDC 2021**

December 13–15, Austin, USA

Initial Paper Submissions Due:
~~March 18, 2021~~ (Passed)

Workshop Proposals Due:
~~May 1, 2021~~ (Passed)

Decision Notification:
Mid-July, 2021

Final Submissions Due:
~~September 30, 2021~~ (Passed)

<https://cdc2021.ieecss.org/>



American Control Conference

ACC 2022

June 8–10, Atlanta, GA, USA

LCSS Option Submission
~~September 14, 2021 (Passed)~~

Manuscript Submission
~~September 28, 2021 (Passed)~~

Acceptance/Rejection Notice
January 24, 2022

Final Manuscript Submission
March 15, 2022

<https://acc2022.a2c2.org/>



Conference on Control Technology and Applications **CCTA 2022**

August 23–25, Trieste, Italy

Paper Submission Due:
February 1, 2022

Decision Notification:
April 22, 2022

Registration Opens:
Middle of May, 2022

Final Submissions:
Middle of June, 2022

<https://ccta2022.ieecss.org/>



Conference on Decision and Control
CDC 2022

December 6–9, Cancun, Mexico