

Patrizio Colaneri: CV and Publications

CURRENT POSITION

- Full professor of Automatica at Politecnico di Milano (2000 -)

PREVIOUS POSITIONS

- Head of the PhD school in Information Technology at Politecnico di Milano (2007 - 2009)
- Associate professor of Automatica at Politecnico di Milano (1992 - 2000)
- Researcher at the National Research Council (1984 - 1992)
- Control Engineer at Elettromeccanica Parizzi (1982 - 1984)

EDUCATION

- Dottorato degree (Ph.D) in Automatic Control (1988)
- Laurea degree (Master) in Electrical Engineering (1981 - Politecnico di Milano)

AWARDS AND RECOGNITIONS

- **IEEE** Fellow for "Contribution in Periodic and Switching Control", class 2011.
- **IFAC Fellow**, class 2011
- Outstanding Service in IFAC
- Outstanding service in the IFAC journal AUTOMATICA

TEACHING ACTIVITY

- Since 1992 regular teaching activity (undergraduate/graduate) in the field of Automatica.
- Regular PhD courses in Milano (Italy), Linz (Austria), National school in Bertinoro (Italy) on Robust and Switching Control since 2000.

SERVICE AS JOURNAL EDITOR

- Associate Editor of AUTOMATICA, the IFAC Journal (outstanding service certificate) (1999 - 2005).
- Editorial board of Applied and Computational Mathematics (2004 -)
- Subject Editor International Journal Robust and Nonlinear (2008 - 2017)
- Associate Editor of IEEE Transaction on Automatic Control (2008- 2009)
- Senior Editor of IEEE Transaction on Automatic Control (2009-2017)
- Senior Editor of the IFAC Journal Nonlinear and Hybrid Systems (2014-2019)

ORGANIZATION OF INTERNATIONAL CONFERENCES

- In the IPC of many International Conferences (not listed)
- Program Chair IEEE MSC-CCA, Buenos Aires, 2016.

- Co-program chair of the 2011 IFAC World Congress
- General Chair of the 4rd IFAC Symposium on Robust Control Design (ROCOND), Milano, 2003.
- NOC Chair the IFAC Workshop PSYCO 2001, Cernobbio, Italy, 2001.
- Co-Organizer of the International Workshop: "The Riccati Equation in Control, Systems, and Signals", Como, Italy, 1989.

INTERNATIONAL TECHNICAL COMMITTEES

- Chair Italian National Member Organization of IFAC (2017-)
- TB member IFAC (2008-2020)
- Chair of the IFAC Coordinating Committee on Design Methods (2008 - 2014)
- Chair of the IFAC Technical Committee on Control Design (2002 - 2008)
- Member of the IFAC Technical Committee on Robust Control.
- Member of the IEEE Technical Committee on Computer aided control system design (CACSD).
- Member of the IEEE Technical Committee on Systems with uncertainties (SU).
- Member of International Promotion & PhD Graduation Committees (not listed)

VISITING POSITIONS

- University of Maryland (1989/1990)
- University of Linz (periodically, 2000-2019)
- Hamilton Institute, Maynooth (Ireland) (2009)

PLENARIES & INVITED TALKS

- *Optimal switching control: theory and applications*, University of Sheffield, Dept. of Automatic Control and Systems Engineering, October 2019.
- *Positive switched systems: analysis and applications*, tutorial session at CDC 2018, Miami (USA).
- *Improving performances via switching: theory and applications*, **Plenary talk** at IFAC MICNON, Guadalajara (MX), 2018.
- *Stability and stabilization of Poisson jump linear systems*, Banyuls sur Mer, WUDS, 2017.
- *Improving performances via switching: theory and applications*, Invited talk SICE ISCS, Nagoya (JP), 2016.
- *Energy saving issues in railway automation*, "Workshop Coops", Osaka (JP) 2015.
- *Stability and Optimization of Dual Switching Linear Positive Systems*, "Optimization and Application in Control and Data Science", Moscow, Russia, 2015.
- *On the discretization of switched systems with constraints*, Workshop ArHyco, Paris, 2012.
- *Dwell time analysis of deterministic and stochastic switched systems*, **Plenary talk** at the European Control Conference, Budapest, 2009.
- *Analysis and control of switched linear systems*, **Plenary talk** at the 2nd Inter. Conf. on Control and Optimization with Ind. Applications, Baku, Azerbaijan, 2008.
- *Deterministic and stochastic switched linear systems*, Workshop on Robust control, Aiwaj Japan, 2008.
- *Dwell time and time and Lyapunov Metzler inequalities in switching control of linear systems* Robust Control Workshop, Delft 2005.

- *Control Design*, IFAC Milestone, Prague, 2005.
- *Periodic Control Systems: theoretical aspects*, **Plenary talk** at 2nd IFAC workshop on Periodic Systems and Control, Yokohama, **JP**, 2004.
- *Hinf smoothing in discrete-time: a direct approach*", Workshop on Robust control, Cascais Portugal, 2002.
- *Invariant representations of discrete-time periodic system: a survey*", V Workshop on Nonlinear, Adaptive and Linear Systems, CINVESTAV, Mexico **D.F.** 1998.
- *Full information mixed H2-Hinf control problem*, Robust Control Workshop (Napa Valley), 1996.
- *Recent advances in optimal filtering and control: periodic LQG theory and lifting isomorphism*", SIAM Conf. on Linear Algebra in Systems, Signals and Control, S.Francisco, 1990.
- *Reachability and Controllability subspaces of discrete-time linear periodic systems*", Workshop on Linear and Nonlinear Math. Contr. Theory, Torino, 1986.

PROJECTS

- PI Polimi PRIN 2017
- PI Polimi: HCM project: "System identification and modelling network -SIMONET" (1994 -1997)
- PI Polimi: Joint project between Politecnico di Milano and Trnka Laboratory of the University of Praga (1997-2000)
- PI Polimi: European Network of Excellence "Europoly" (1996-1999)
- PI Politecnico di Milano PRIN 2005
- co-PI Polimi: Air Research Office "Control of systems with periodic coefficients, with application to active rotor control" (2001-2005).
- External PI: Australian Research Council Project "Dynamics & Feedback in Networked Biological Systems" (2013-2015).

COLLABORATION WITH INDUSTRIES

Simulation and control of electrical power plants, antiskid apparatuses for railway vehicles, control of induction machines, distributed control of braking, ecodrive for railroad vehicles, electromechanical switches (Elettromeccanica Parizzi, Alstom, Microelettrica Scientifica).

Co-author patent Alstom-Politecnico di Milano : EP 19305032.5 Method for controlling a railway vehicle, a controller and a railway vehicle.

RESEARCH ACTIVITY

The research activity covers (but not limited to) the following points.

- *Analysis, filtering and control of periodic systems*
- *Robust control and filtering of time-invariant systems*
- *Switching Control*
- *Railway automation*
- *Epidemiology modelling*
- *Opinion dynamics*

PUBLICATIONS

(A) INTERNATIONAL BOOKS

[A4] P. Bolzern, P. Colaneri, "Positive Markov Jump Systems", Foundation and Trends in Control Science, Now Publishing, Vol. 2: No. 3-4, pp 275-427, 2015.

[A3] F. Blanchini, P. Colaneri, E. Valcher, "Switched Positive Linear Systems", Foundation and Trends in Control Science, Now Publishing, Vol. 2: No. 2, pp 101-273, 2015.

[A2] S. Bittanti, P. Colaneri, "Periodic Systems: Filtering and Control", Springer-Verlag, 2009.

[A1] P. Colaneri, A. Locatelli, J.C. Geromel, "Control Theory and Design. A RH2-RHinf viewpoint", Academic Press, 1997.

(B) INTERNATIONAL JOURNALS

[B115] L. Stella, D. Bauso, P. Colaneri, "Mean-field game for collective decision-making in honeybees via switched systems", *IEEE Trans. Automatic Control*, 2021.

[B114] L. Stella, A. Pinel Martinez, D. Bauso, P. Colaneri. "The role of asymptomatic infections in the Covid-19 epidemic via complex networks and stability analysis", *SIAM J. Control and Optimization*, 2021.

[B113] Matteo Ravasio, Gian Paolo Incremona, Patrizio Colaneri, Andrea Dolcini, Piero Moia, "Distributed Nonlinear AIMD Algorithms for Electric Bus Charging Plants", *Energies*, 2021.

[B112] G.P. Incremona, L. Mirkin, P. Colaneri, "Integral Sliding-Mode Control With Internal Model: A Separation", *IEEE Control Systems Letters*, 2021, DOI: 10.1109/LCSYS.2021.3079187.

[B111] G. Giordano, M. Colaneri, A. Di Filippo, F. Blanchini, P. Bolzern, G. De Nicolao, P. Sacchi, P. Colaneri, R. Bruno, "Modeling vaccination rollouts, SARS-CoV-2 variants and the requirement for non-pharmaceutical interventions in Italy", *Nature Medicine*, 2021, <https://doi.org/10.1038/s41591-021-01334-5>.

[B110] Z. Ning, L. Zhang, A. Mesbah, P. Colaneri, Stability Analysis and Stabilization of Discrete-Time Non-homogeneous Semi-Markov Jump Linear Systems: A Polytopic Approach, *Automatica*, 2020.

[B109] F. Fabiani, G. Belgioioso, F. Blanchini, P. Colaneri, S. Grammatica, "Convergence in uncertain linear systems", *Automatica*, 2020.

[B108] G. Giordano, F. Blanchini, R. Bruno, P. Colaneri, A. De Matteo, M. Colaneri, "Modelling the COVID-19 epidemic and implementation of population-wide interventions in Italy", *Nature Medicine*, 2020, <https://doi.org/10.1038/s41591-020-0883-7>.

[B107] P. Bolzern, P. Colaneri, G. De Nicolao, "Opinion Dynamics in Social Networks: The Effect of Centralized Interaction Tuning on Emerging Behaviors", *IEEE Transactions on Computational Social Systems*, 2020, 10.1109 / TCSS.2019.2962273.

[B106] G. Chesi, P. Colaneri, Structured Feedback Synthesis for Stability and Performance of Switched Systems, *IEEE Transaction on Automatic Control*, 2019, DOI: [10.1109/TAC.2019.2962218](https://doi.org/10.1109/TAC.2019.2962218).

[B105] H. Farooqi, L. Fagiano, P. Colaneri, Shrinking horizon parametrized predictive control with application to energy-efficient train operation, *Automatica*, vol.112, pp. 108635-108642, 2020.

[B104] F. Blanchini, G. Chesi, P. Colaneri, G. Giordano, "Checking structural stability of BDC decomposable systems via convex optimization", *IEEE CSS Letters*, vol. 4, pp. 4, 205-210, 2019.

[B103] Y. Chen, P. Bolzern, P. Colaneri, "Stability, L1 performance and state feedback design for linear systems in ice-cream cones", *International Journal of Control*, vol.92, pp. 1-9, 2019.

[B102] H. Farooqi, G. P. Incremona, P. Colaneri, "Railway Collaborative Ecodrive via Dissension Based Switching", *Nonlinear Model Predictive Control*, *European Journal of Control*, <https://doi.org/>

10.10 16/j.ejcon.2019.04.005, 2019.

[B101] Z. Ning, L. Zhang, P. Colaneri, "Semi-Markov jump linear systems Semi-Markov Jump Linear Systems With incomplete sojourn and transition information: analysis and synthesis, *IEEE Transactions on Automatic Control*, 2019.

[B100] Saqib Nisar Shah, Gian Paolo Incremona, Paolo Bolzern, Patrizio Colaneri, "Optimization Based AIMD Saturated Algorithms for Public Charging of Electric Vehicles", *European Journal of Control*, Vol. 47, pp. 74-83, 2019.

[B99] R. Schmied, P. Colaneri, "Mixed H2/Hinf control for automated highway driving", *Mechatronics*, Vol. 57, pp. 63-72, 2019.

[B98] P. Bolzern, P. Colaneri, G. De Nicolao, "Opinion influence and evolution in social networks: a Markovian agents model", *Automatica*, Vol. 100, pp. 219-230, 2019.

[B97] J.C. Geromel, P. Colaneri, P. Bolzern, "Differential Linear Matrix inequality in Optimal Sampled-Data Control", *Automatica*, Vol. 100, pp. 289-298, 2019.

[B96] S. Miani, M. Zilletti, P. Gardonio, F. Blanchini, P. Colaneri, "Switching and sweeping vibration absorbers: theory and experimental validation", *Automatica*, Vol. 93, pp. 290-301, 2018.

[B95] B. Picasso, D. Caporale, P. Colaneri, "Braking Control in Railway Vehicles: A Distributed Preview Approach", *IEEE Transactions on Automatic Control*, AC-63, pp. 189-195, 2018.

[B94] G. Chesi, P. Colaneri, "Homogeneous Rational Lyapunov Functions for Performance Analysis of Switched Systems with Arbitrary Switching and Dwell-Time Constraints", *IEEE Transactions on Automatic Control*, AC-62, N. 10, pp. 5124-5138, 2017.

[B93] L. Zhang, Y. Ting, P. Colaneri, "Stability and Stabilization of Semi-Markov Jump Linear Systems with Exponentially Modulated Periodic Distributions of Sojourn Time", *IEEE Transactions on Automatic Control*, Vol. 62, N. 6, pp. 2870-2885, 2017.

[B92] P. Bolzern, P. Colaneri G. De Nicolao, "Design of stabilizing strategies for discrete time linear systems dual switching", *Automatica*, Vol. 69, pp. 93-100, 2016.

[B91] F. Blanchini, P. Colaneri, R.H. Middleton, "Optimal control of a class of positive Markovian bilinear systems", *Nonlinear Analysis: Hybrid Systems*, Vol. 21, pp. 155-170, 2016.

[B90] L. Zhang, Y. Leng, P. Colaneri, "Stability and stabilization of discrete-time semi-Markov jump linear systems via semi-Markov kernel approach", *IEEE Trans. Automatic Control*, Vol. 61, N. 2, pp. 503-508, 2016.

[B89] M. Souza, J. C. Geromel, P. Colaneri, R. N. Shorten, "Discretization of sparse linear systems: an optimization approach", *System and Control Letters*, 80: pp. 42-49, 2015.

[B88] J.C. Geromel, G. S. Daecto, P. Colaneri, "Minimax Control of Markov Jump Linear Systems", *International Journal of Adaptive Control and Signal Processing*, Vol. 30, pp. 1152- 1162, 2016.

[B87] F. Blanchini, P. Colaneri, Y. Jujisaki, S. Miani, F. A. Pellegrino, "A Youla-Kucera parametrization approach to output feedback relatively optimal control", *System and Control Letters*, Vol. 81, pp. 14-23, 2015.

[B86] P. Colaneri, R. Middleton, Z. Chen, D. Caporale, F. Blanchini, "Convexity of the cost functional in an optimal control problem for a class of positive switched systems", *Automatica*, Vol. 50, N. 4, pp. 1227-1234, 2014.

[B85] T. Ionesco, A. Astolfi, P. Colaneri, "Families of moment matching based, low order approximations for linear systems", *Systems and Control Letters*, Vol. 64, pp. 47-63, 2014.

[B84] P. Bolzern, P. Colaneri, G. De Nicolao, "Stochastic stability of positive Markov Jump Linear Systems", *Automatica*, Vol. 50, pp. 1181-1187, 2014.

[B83] E. Hernandez Vargas, R. Middleton, P. Colaneri, "Switching strategies to mitigate HIV mutation", *IEEE Transactions on Control Systems Technology*, Vol. 22, N. 4, pp. 1623-1628, 2014.

[B82] F. Blanchini, P. Colaneri, D. Casagrande, P. Gardonio, S. Miani, "Switching gains for semi- active damping via non-convex Lyapunov functions", *IEEE Transactions on Control Systems Technology*, Vol. 22,

N. 2, pp. 721-728, 2014.

- [B81] M. Farina, P. Colaneri, R. Scattolini, "Block-wise discretization accounting for structural constraints", *Automatica*, Vol. 49, pp. 3411-3417, 2013.
- [B80] E. Hernandez Vargas, P. Colaneri, R. Middleton, "Optimal therapy scheduling for a simplified HIV infection model", *Automatica*, Vol. 49, pp. 2874-2880, 2013.
- [B79] B. Picasso, P. Colaneri, "Non-minimal factorization approach to the linf-control of discrete- time linear systems", *Automatica*, Vol. 49, pp. 2867-2873, 2013.
- [B78] P. Bolzern, P. Colaneri, "Periodic switched systems in discrete-time: stability and input- output norms", *Int. J Control*, Vol. 86, 7, pp. 1258-1268, 2013.
- [B77] S.K. Sajja, F. Rossi, P. Colaneri, R. Shorten, "Extensions of "Pade Discretization for Linear Systems With Polyhedral Lyapunov Functions" , *IEEE Transactions Automatic Control*, Vol. 58, 8, pp. 2071-2076, 2013.
- [B76] P. Bolzern, P. Colaneri, G. De Nicolao, "Almost sure stability of Markov jump linear systems with deterministic switching", *IEEE Transactions Automatic Control*, Vol. 58, N.1, pp. 209-2014, 2013.
- [B75] F. Blanchini, P. Colaneri, M.E. Valcher, "Co-positive Lyapunov functions for the stabilization of positive switched systems", *IEEE Transactions Automatic Control*, Vol. 57, N. 12, pp. , 3038-3050, 2012.
- [B74] J.C. Geromel, P. Colaneri, P. Bolzern, "Passivity of switched linear systems: analysis and control design", *Systems & Control Letters*, Vol. 61, pp. 549-554, 2012.
- [B73] A. Zappavigna, P. Colaneri, S. Kirkland, R. Shorten, "Essentially negative news about positive systems", *Linear Algebra and Its Applications*, Vol. 436, pp. 3425-3442, 2012.
- [B72] C. Fuertmueller, P. Colaneri, L. Del Re, Adaptive Robust Stabilization of a Continuous Casting Process, *Automatica*, Vol.48, pp. 225-232, 2012.
- [B72] G. Chesi, P. Colaneri, J.C. Geromel, R. Middleton, R. Shorten, "A non-conservative LMI condition for stability of switched systems with guaranteed dwell time", *IEEE Transaction on Automatic Control*, Vol. 57, 5, pp. 1297- 1302, 2012.
- [B70] P. Colaneri, J.C. Geromel, P. Bolzern, "Root mean square gain of discrete-time switched linear systems under dwell time constraints", *Automatica*, Vol. 47, N.8, 2011.
- [B69] F. Rossi, P. Colaneri, R. Shorten, "'Pade' discretization for linear systems with polyhedral Lyapunov functions", *IEEE Transaction on Automatic Control*, Vol. 56, pp. 2717 - 2722, 2011.
- [B68] E. Hernandez-Vargas, P. Colaneri, R. Middleton, F. Blanchini, "Discrete-time control for switched positive systems with application to mitigating viral escape", *International Journal of Robust and Nonlinear Control*, Vol. 21, N. 10, pp. I093-1111, 2011.
- [B67] P. Bolzern, P. Colaneri, G. De Nicolao, "Markov jump linear systems with switching transition rates: Mean square stability with dwell-time", *Automatica*, Vol. 46, N. 6, pp. 1081-1088, 2010.
- [B66] B. Picasso, D. De Vito, R. Scattolini, P. Colaneri, "An MPC approach to the design of two- layer hierarchical control systems", *Automatica*, Vol. 46, N. 5, pp. 823-831, 2010.
- [B65] I. Boniolo, P. Colaneri, P. Bolzern, M. Corless, R. Shorten, "On the design and synthesis of limit cycles using switching linear systems", *Int. J Control.*, Vol. 83 - v8383, N. 5, pp. 915- 927, 2010.
- [B64] M. Tanelli, B. Picasso, P. Bolzern, P. Colaneri, "Almost Sure Stabilization of Uncertain Continuous-Time Markov Jump Linear Systems" , *IEEE Transaction on Automatic Control*, Vol. 55, pp. 195-201, 2010.
- [B63] J.C. Geromel, P. Colaneri, "H-infinity and dwell time specifications of continuous switched linear systems", *IEEE Transaction on Automatic Control*, Vol. 55, pp. 207-212, 2010.
- [B62] P. Colaneri, "Dwell time analysis of deterministic and stochastic switched systems", *European Journal of Control*, Vol. 15, pp. 228-248, 2009.
- [B61] P. Colaneri, V. De Souza, "Relations between stochastic stability of Markovian jump linear systems and stabilization of deterministic switched linear systems", *Appl. Comput. Math.*, Vol. 7, 2008.
- [B60] E. Gruenbacher, P. Colaneri, L. Del Re, "Nonlinear Control with Guaranteed Robustness Bounds of a Dynamical Engine Test Bench", *Automatica*, Vol. 44, N. 9, pp. 2230-2240, 2008.

- [B59] P. Bolzern, P. Colaneri, G. De Nicolao, "Almost sure stability of stochastic linear systems with ergodic parameters", *European Journal of Control*, Vol. 14, N. 2, pp. 114-123, 2008.
- [B58] J.C. Geromel, P. Colaneri, P. Bolzern, "Dynamic output feedback control of switched linear systems", *IEEE Transaction on Automatic Control*, Vol. 53, N. 3, pp. 720-733, 2008.
- [B57] Franco Blanchini, Patrizio Colaneri, Felice Andrea Pellegrino, "Simultaneous performance achievement via compensator blending", *Automatica*, 44, 1, pp. 1-14, 2008.

- [B56] P. Colaneri, J. C. Geromel, A. Astolfi, "Stabilization of continuous-time switched nonlinear Systems", *Systems and Control Letters* , 57, pp. 95-103, 2008.
- [B55] M. Lovera, P. Colaneri, R. Celi, C. Malpica, "Discrete-time, closed-loop aeromechanical stability analysis of helicopters with higher harmonic control", *Journal of Guidance, Control, and Dynamics*, Vol. 30, N.5, pp. 1249-1260, 2007.
- [B54] Bars, Ruth; Colaneri, Patrizio; de Souza, Carlos E.; Dugard, Luc; Allgower, Frank; Kleimenov, Anatolii; Theory, algorithms and technology in the design of control systems, *Annual Reviews in Control* Volume: 30, Issue: 1, pp. 19-30, 2006.
- [B53] J.C. Geromel, P. Colaneri, "Stability and stabilization of continuous-time switched systems", *SIAM J. contr. And Opt.*, Vol. 45, N. 5, pp. 1915-1930, 2006.
- [B52] J.C. Geromel, P. Colaneri, "Stability and stabilization of discrete-time switched systems", *International Journal of Control*, 79, 7, pp. 719-728, 2006.
- [B51] P. Bolzern, P. Colaneri, G. De Nicolao, "On almost sure stability of continuous-time Markov jump linear systems", *Automatica* , 42, pp.983-988, 2006.
- [B50] P. Colaneri, A. Ferrante, "Algebraic Riccati equation and I-spectral factorization for Hinf smoothing and deconvolution", *SIAM J. Control and Optimization*, 45, pp.123-145, 2006.
- [B49] J.C. Geromel, P. Colaneri, "Robust stability of time varying polytopic systems", *Systems and Control Letters*, 55, pp. 81-85, 226, 2006.
- [B48] M. Lovera, P. Colaneri, C. Malpica, R. Celi, "Closed-loop aeromechanical stability of a hingeless rotor helicopter with higher harmonic control", *Journal of Guidance Control and Dynamics*, Vol. 29, N. 1, pp. 179-199, 2006.
- [B47] A.Astolfi, P.Colaneri, "Hankel/Toeplitz matrices and the static output feedback stabilization problem", *Mathematics of Control, Signals, and Systems*, Volume: 17, Issue: 4, pp. 231-268 , 2005. [B46] P. Colaneri, "Theoretical aspects of continuous-time periodic systems", *Annual Reviews in Control*, pp. 206-215, 2005.
- [B45] P. Colaneri, "Periodic Control Systems: theoretical Aspects" , *Int. J. Applied and Computational Mathematics*, Vol. 3, N.2, pp- 84-94,2004.
- [B44] A.Astolfi, P.Colaneri, A note on the existence of positive realizations, *Linear Algebra and its applications*, 390, pp. 329-343, 2004.
- [B43] M. Lovera, P. Colaneri, R. Celi, "On the role of zeros in rotorcraft aeromechanics", *Journal of the American Helicopter Society*, 49, 3, pp. 318-327, 2004.
- [B42] P. Colaneri, A. Ferrante, "Algebraic Riccati equation and I-spectral factorization in Hinf estimation", *Systems and Control Letters*, Vol. 51, pp. 383-393, 2004.
- [B41] P. Bolzern, P. Colaneri, G. De Nicolao, "On discrete-time Hinf fixed-lag smoothing", *IEEE Trans. on Signal processing*, 52, pp. 132-141, 2004.
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- [B37] P.Bolzern, P.Colaneri. G.De Nicolao, U.Shaked, "Guaranteed Hinf bounds for Wiener filtering and prediction", *Int. J Robust and Nonlinear Control*, Vol. 12, pp. 41-46, 2002.
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- [B35] P.Colaneri, "State-feedback problems in H2 and Hinf for continuous-time periodic systems. Part II: feedback problems", *Kybernetika*, Vol. 36, N. 2, pp. 211-242, 2000.
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- [B33] S.Bittanti, P.Colaneri, "Invariant representations of discrete-time periodic systems - A survey", *Automatica* , Vol. 36, N. 12, pp. 1777-1793 ,2000.

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- [B28] P.Colaneri, V.Kucera, "The model matching problem for periodic discrete-time systems", *IEEE Trans. Aut. Control*, Vol. 42, 10, pp. 1472-1476, 1997.
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