BIBLIOGRAPHY

1954

A.V. Balakrishnan. "On Powers of the Infinitesimal Generators of Groups and Semigroups of Linear Bounded Transformations." Ph.D. in Mathematics Thesis. XXXXX

1956

A.V. Balakrishnan and R. Drenick. "On Optimum Non-linear Extraction and Coding Filters." IRE Transactions of the Professional Group on Information Theory. Vol. *2,* pp. 166-173. September 1956.

A.V. Balakrishnan. "Multipath Distortion of TV Signals and the Design of a Corrective Filter." IRE International Convention Record. Pp. 167-175. June 1956.

1957

A.V. Balakrishnan. "A Note on the Sampling Principle for Continuous Signals." IRE Transactions of the Professional Group on Information Theory. Volume IT-3, Number 2, pp. 143-146. June 1957.

1958

A.V. Balakrishnan. "Representation of Abstract Riesz Potentials of the Elliptic Type." Bulletin of the American Mathematical Society. Vol. 64, Number 5, pp. 288-289. September 1958.

A.V. Balakrishnan. "Abstract Cauchy Problems of the Elliptic Type." Bulletin of the American Mathematical Society. Vol. 64, Number 5, pp. 290-291. September 1958.

1959

A.V. Balakrishnan. "An Operational Calculus for Infinitesimal Generators of Semigroups." Transactions of the American Mathematical Society. Vol. 91, Number 2, pp. 330-353. May 1959.

A.V. Balakrishnan. "On a Characterization of Covariances." The Annals of Mathematical Statistics. Volume 30, Number 3, pp. 670-675. September 1959.

1960

A.V. Balakrishnan and I.J. Abrams. "Detection Levels and Error Rates in PCM Telemetry Systems." IRE International Convention Record. Number 5, pp. 37-55. 1960.

A.V. Balakrishnan. "Fractional Powers of Closed Operators and the Semigroups Generated by Them." Pacific Journal of Mathematics. Vol. 10, Number 2, pp. 419-437. 1960.

A.V. Balakrishnan. "On a Characterization of Processes for Which Optimal Mean-Square Systems are of Specified Form." IRE Transactions of the Professional Group on Information Theory. Vol. IT-6, Number 4, pp. 490-500. September 1960.

A.V. Balakrishnan. "Estimation and Detection Theory for Multiple Stochastic Processes." Journal of Mathematical Analysis and Applications. Vol. 1, Number 3-4, pp. 386-410. December 1960.

1961

A.V. Balakrishnan. "Matched Filters for Multiple Processes." IRE Transactions of the Professional Group on Information Theory. Vol. IT-7, Number 1, pp. ??? January 1961.

A.V. Balakrishnan. "On a Class of Elliptic Equations in the Theory of Markoff Processes." Journal of Mathematics and Mechanics. Vol. 10, Number 4, pp. 607-617. July 1961.

A.V. Balakrishnan. "A Contribution to the Sphere-Packing Problem of Communication Theory." Journal of Mathematical Analysis and Applications. Vol. 3, Number 3, pp. 485-506. December 1961.

A.V. Balakrishnan. "Prediction Theory for Markoff Processes." Pacific Journal of Mathematics. Vol. 11, Number 4, pp. 1171-1182. 1961.

1962

A.V. Balakrishnan and J.E. Taber. "Error Rates in Coherent Communication Systems." IRE Transactions of the Professional Group on Communication Systems. Vol. CS-10, Number 1, pp. 86-89. March 1962.

A.V. Balakrishnan. "A Steepest Descent Method for a Class of Final Value Control Systems." IRE Transactions on Automatic Control." Vol. AC-7, Number 3, pp. ???. April 1962.

A.V. Balakrishnan. "On the Problem of Time Jitter in Sampling." IRE Transactions of the Professional Group on Information Theory. Vol. IT-8, Number 3, pp. 226-236. April 1962.

A.V. Balakrishnan and H.C. Hsieh. "Function Space Methods in Control Systems Optimization." The Proceedings of the Optimum System Synthesis Conference. AFOSR, Dayton, Ohio. September 1962.

A.V. Balakrishnan. "An Adaptive Nonlinear Data Predictor." The Proceedings of the National Telemetry Symposium. Washington, D.C. 1962. Reprinted in: Data Compression. L.D. Davisson

and R.M. Gray, editors. Benchmark Papers in Electrical Engineering and Computer Science Series, 14, Dowden, Hutchinson & Ross, 1976. Pp.???? XXXXX CHECK

1963

A.V. Balakrishnan. "An Operator Theoretic Formulation of a Class of Control Problems and a Steepest Descent Method of Solution." J. SIAM on Control. Ser. A, Vol. 1, Number 2, pp. 109-127. June 1963. Or March?

A.V. Balakrishnan. "Prediction and Filtering." IEEE Transactions on the Professional Technical Group on Information Theory. Vol. IT-9, Number 4, pp.238-240. October 1963.

A.V. Balakrishnan. "Determination of Nonlinear Systems from Input-Output Data." From the Princeton University Conference, Identification Problems in Communication and Control Systems. Paper delivered at the 54th Meeting of PUC, 21-22 March 1963. Pp. 31-49.

A.V. Balakrishnan. "Adaptive Methods in Communication Systems." Part I and II. Communication Systems Research Lab. Department of Engineering, UCLA. August 1963.

A.V. Balakrishnan. "A Proof That the Regular Simplex Coding is Optimum at Every Signal-Noise Ratio." Pp. 1-5. Unpublished. Revised May 1963.

A.V. Balakrishnan. "Simultaneous Reduction of Quadratic Forms over a Hilbert Space." Pp. 1-20. Unpublished. 1963.

A.V. Balakrishnan. "Progress in Estimation, Prediction and Filtering Theory in the U.S. 1960-1963." IEEE Transactions on Information Theory. September 1963. XXXXX

A.V. Balakrishnan. Space Communications. 1963. XXXXX

1964

A.V. Balakrishnan. "A General Theory of Nonlinear Estimation Problems in Control Systems." Journal of Mathematical Analysis and Applications. Vol. 8, Number 1, pp. 4-30. February 1964.

A.V. Balakrishnan. "Adaptive Methods in Communication Systems." The Proceedings of the Third Canadian Symposium on Communications. September 1964. Pp. ?????

A.V. Balakrishnan. "Effect of Linear and Nonlinear Signal Processing on Signal Statistics." Radio Science Journal of Research NBS/USNC-URSI. Vol. 68D, Number 9, pp. 953-965. September 1964.

A.V. Balakrishnan. "On a Class of Nonlinear Estimation Problems." IEEE Transactions on Information Theory. Vol. IT-10, Number 4, pp. 314-320. October 1964.

A.V. Balakrishnan and R.A. Stampfl. "An Adaptive Data Compressor for TIROS Picture Transmission." The Proceedings of the International Conference on Microwaves, Circuit and Information Theory (ICMCI). Tokyo, Japan, 10 September 1964. Presented by R.I. Kuts for A.V. Balakrishnan and R.A. Stampfl. Pp. ???

A.V. Balakrishnan. "Signal Selection Theory for Space Communication Channels." In: Advances in Communication Systems. Vol. 1. New York: Academic Press. 1964. Pp. 1-31. XXXXXX

1965

A.V. Balakrishnan. "Optimal Control Problems in Banach Spaces." Paper was presented at the Symposium on Mathematical Theory of Optimal Control, Ann Arbor, 1964. J. SIAM on Control, Ser. A, Vol. 3, Number 1, pp. 152-180. 1965.

A.V. Balakrishnan. "Semigroup Theory and Control Theory." The Proceedings of IFIP Congress on Information Processing. Washington D.C.: Spartan Books, Inc., Germany 1965. Pp. 157-163.

A.V. Balakrishnan. "Essentially Band-Limited Stochastic Processes." IEEE Transactions on Information Theory. Pp. 154-156. January 1965.

A.V. Balakrishnan. "Linear Systems with Infinite Dimensional State Spaces." The Proceedings of the Symposium on System Theory at Polytechnic Institute of Brooklyn. 20-21 April 1965. Pp. 69-88.

1966

A.V. Balakrishnan. "On the Controllability of a Nonlinear System." The Proceedings of the National Academy of Sciences. Vol. 55, Number 3, pp. 465-468. March 1966.

A.V. Balakrishnan. "On the State Space Theory of Linear Systems." Journal of Mathematical Analysis and Applications. Vol. 14, Number 3, pp. 371-391. June 1966.

A.V. Balakrishnan. "On the State-Space Theory of Nonlinear Systems." In: Functional Analysis and Optimization. E. Caianiello, editor. New York: Academic Press, 1966. Pp. 15-36.

A.V. Balakrishnan. Advances in Communication Systems. Vol. 2, 1966. XXXXX

1967

A.V. Balakrishnan. "Foundations of the State-Space Theory of Continuous Systems. I." Journal of Computer and System Sciences. Vol. 1, Number 1, pp. 91-116. April 1967.

A.V. Balakrishnan. "On the Problem of Deducing States and State-Relations from Input-Output Relations for Linear Time-Varying Systems." J. SIAM on Control. Vol. 5, Number 3, pp. 309-325. 1967.

A.V. Balakrishnan and J.-L. Lions. "State Estimation for Infinite-Dimensional Systems." Journal of Computer and System Sciences. Vol. 1, Number 4, pp. 391-403. December 1967.

A.V. Balakrishnan. "Identification of Control Systems from Input-Output Data." The Proceedings of the IFAC Symposium on Identification in Automatic Control Systems. Prague, Czechoslovakia, June 1967. Pp. 1-6.

A.V. Balakrishnan. "Coding, Modulation, and Signal Processing: Some Current Open Problems." In: Progress in Radio Science 1963-1966: The Proceedings of the XVth General Assembly of URSI. Munich, West Germany, 5-15 September 1966. Vol. 2. International Scientific Radio Union, 1967, Pp. 1723-1743.

A.V. Balakrishnan and L.W. Taylor. "Identification of Human Response Models in Manual Control Systems." The Proceedings of the IFAC Symposium on Identification in Automatic Control Systems. Prague, Czechoslovakia, June 1967. Pp. 7-14.

1968

A.V. Balakrishnan. "Signal Design for a Class of Clutter Channels." IEEE Transactions on Information Theory. Vol. IT-14, Number 1, pp. 170-173. January 1968.

A.V. Balakrishnan. "On a New Computing Technique in Optimal Control Theory and the Maximum Principle." The Proceedings of the National Academy of Sciences. Vol. 59, Number 2, pp. 373-375. February 1968.

A.V. Balakrishnan. "A New Computing Technique in System Identification." Journal of Computer and System Sciences. Vol. 2, Number 1, pp. 102-116. June 1968.

A.V. Balakrishnan. "State-Space Theory of Linear Time Varying Systems." In: System Theory. L. Zadeh and E. Polak, editors. McGraw-Hill, 1968. Pp. 95-125.

A.V. Balakrishnan. "On a New Computing Technique in Optimal Control." J. SIAM on Control. Vol. 6, Number 2, pp. 149-173. May 1968.

A.V. Balakrishnan. "On a New Computing Technique in Optimal Control and Its Application to Minimal-Time Flight Profile Optimization." The Proceedings of the Second International Colloquium on Optimization Techniques. June 1968, Novosibirsk, USSR. Pp. 1-21.

A.V. Balakrishnan. "Stochastic System Identification Techniques." The Proceedings of the U.S. Army Advanced Seminar on Stochastic Optimization and Control. Herman F. Karreman, editor. John Wiley & Sons, Inc., 1968. Pp. 65-89.

1969

A.V. Balakrishnan. "The Epsilon Technique – a Constructive Approach to Optimal Control." In: Control Theory and the Calculus of Variations. New York: Academic Press, Inc., 1969. Pp. 343-383.

A.V. Balakrishnan. "On a New Computing Technique in Optimal Control and Its Application to Minimal Time Flight Profile Optimization." Journal of Optimization Theory and Applications. Vol. 4, Number 1, pp. 1-21. July 1969.

A.V. Balakrishnan. "Computing Algorithms for Detection Problems." The Proceedings of the Symposium on Computer Processing in Communications. Polytechnic Institute of Brooklyn. 8-10 April 1969. Pp. 603-615.

A.V. Balakrishnan and V. Peterka. "Identification in Automatic Control Systems." Automatika. Vol. 5, pp. 817-829. 1969. Also in: The Fourth Congress of the International Federation of Automatic Control. Warszawa, 16-21 June 1969. Pp. 1-43.

A.V. Balakrishnan. "Information Theory in the USA with Special Reference to Telecommunications." Progress in Information Theory in the U.S.: 1966-1969. The XVIth General Assembly: Scientific Commission VI: Information Theory, Union Radio Scientifique Internationale, Ottawa, Canada. 1969. Pp. 181-190.

1970

A.V. Balakrishnan. "The Epsilon Technique." The Proceedings of the Eleventh Joint Automatic Control Conference of the American Automatic Control Council. 22-26 June 1970. P. 2. (Abstract) WHERE

A.V. Balakrishnan. "A Constructive Approach to the Maximum Principle." The Proceedings of the International Congress of Mathematicians. Nice, France, September 1970. Paris: Gauthier-Villars. Vol. 3, pp. 151-156. 1970.

A.V. Balakrishnan. "Introduction to Optimization Theory in a Hilbert Space." Lecture Notes. Springer-Verlag. 1972. Pp. ??? XXXXX

A.V. Balakrishnan. "Application of the Epsilon Technique to an Optimal Pursuit Problem with Bounded Control." The Proceedings of Hawaii International Conference on System Sciences. January 1971. Shu Lin, editor. Western Periodicals, 1971, p. 417. Abstract. WHERE

A.V. Balakrishnan. "A Computational Approach to the Maximum Principle." Journal of Computer and System Sciences. Vol. 5, Number 2, pp. 163-191. April 1971.

A.V. Balakrishnan. "Identification of Linear Dynamical Systems." The Proceedings of the Third Annual S.E. Symposium on System Theory. Georgia Institute of Technology. April 1971, pp. H1-0 – H1-8.

A.V. Balakrishnan and N.S. Rajbman (Institute of Control Sciences, Moscow, USSR). "Identification of Linear Dynamic Systems." The Proceedings of the All-Union Conference on Automatic Control. October 1971, Moscow, USSR.

A.V. Balakrishnan. "Stochastic Differential Systems." I. Lecture Notes, UCLA, January 1971. XXXXX

A.V. Balakrishnan. "Identification and Adaptive Control Applied to Flight Control System." Presented at the Second All-Union Symposium on Statistical Methods of Control Theory. Tashkent, USSR, April 1971. Published by the USSR Academy of Sciences, the Academy of Sciences of the Uzbek SSR, the Institute of Control Problems, Moscow, April 1972. Pp. 16-55. In the Russian language.

A.V. Balakrishnan. "Introduction to Optimization Theory in a Hilbert Space." Lecture Notes on Operations Research and Mathematical Systems. Vol. 42. Springer-Verlag, 1971. Pp. ??? The Russian translation is published by MIR in 1974. XXXXX

1972

A.V. Balakrishnan. "A Constructive Approach to the Maximum Principle." The Proceedings of the International Congress of Mathematicians. Nice, France. September 1970. Vol. 3. Paris, France: Gauthier-Villars Editeur. 1971. Pp. 151-156.

A.V. Balakrishnan. "Identification and Adaptive Control: An Application to Flight Control Systems." Journal of Optimization Theory and Applications. Vol. 9, Number 3, pp. 187-213. March 1972. PUBLISHER?

A.V. Balakrishnan. "Stochastic Control: A Function Space Approach." J. SIAM on Control. Vol. 10, Number 2, pp. 285-297. May 1972. PUBLISHER?

A.V. Balakrishnan. "A Martingale Approach to Linear Recursive State Estimation." J. SIAM on Control. Vol. 10, Number 4, pp. 754-766. November 1972.

A.V. Balakrishnan. "Modelling and Identification Theory: A Flight Control Application." The Proceedings of the USA – Italy Conference on Theory and Applications of Variable Structure Systems. Sorrento, Italy. DATES?? R. Mohler and A. Ruberti, editors. New York and London: Academic Press, Inc., 1972. Pp. 1-24. XXXXX

A.V. Balakrishnan. "Role of the Computer in Modelling and Identification." This summary of Professor Balakrishnan's talk was prepared from the Conference tapes with the assistance of Larry J. Stephens. The Proceedings of Computer Science and Statistics: the Fifth Annual Symposium on the Interface. Oklahoma State University, 1-2 November 1971. Mitchell O. Locks, editor. Oklahoma State University. 1972. Pp. 17-20.

A.V. Balakrishnan. "Stochastic Differential Systems. I." System Science Department, UCLA, Los Angeles, California, 1972. XXXXX

A.V. Balakrishnan. "System Theory and Stochastic Optimization." The Proceedings of NATO Institute on Network and Signal Processing. Peter Peregrins Press, Ltd., England. 1972. XXXXX PP???

1973

A.V. Balakrishnan. "System Theory and Stochastic Optimization." In: Network and Signal Theory: A NATO Advanced Study Institute. September 1972. J.K. Skwirzynski and J.O. Scanlan, editors. PPI Conference Publication 12. Peregrin Press, Ltd., England, 1973. Pp. 391-396.

A.V. Balakrishnan. "Identification and Stochastic Control of Non-Dynamic Systems." In: Identification and System Parameter Estimation. The Proceedings of the Third IFAC Symposium. The Hague/Delft, the Netherlands, 12-15 June 1973. Vol. 2. P. Eykhoff, editor. Amsterdam London: North-Holland Publishing Company. New York: American Elsevier Publishing Co, 1973. Pp. 679-686.

A.V. Balakrishnan. "Stochastic Differential Systems. Filtering and Control." Lecture Notes in Economics and Mathematical Systems. 84. Springer-Verlag, 1973. XXXXX

A.V. Balakrishnan. "Identification and Adaptive Control of Non-Dynamic Systems." The Proceedings of the Third IFAC Symposium on Identification and Process Parameter Estimation. June 1973. XXXXX

A.V. Balakrishnan. "Identification and Control of Linear Systems with Unknown State Noise." The Proceedings of the Third All-Union Conference on Statistical Methods in Control Processes. Vilnius, USSR, September 1973.

A.V. Balakrishnan. "On the Approximation of Ito Integrals Using Band-Limited Processes." J. SIAM on Control. Vol. 12, Number 2, pp. 237-251. May 1974.

A.V. Balakrishnan. "Time-Optimal Control Synthesis for Non-linear Systems: A flight Dynamic Example." The International Symposium on Computing Methods in Applied Sciences and Engineering. Part 2. Versailles, Paris, France, 17-21 December 1973. R. Glowinski and J-L. Lions, editors. Lecture Notes in Computer Sciences. 11. Springer-Verlag, 1974. Pp. 289-311.

A.V. Balakrishnan. "A Note on the Structure of Optimal Stochastic Controls." Journal of Applied Mathematics and Optimization. Vol. 1, Number 1, pp. 87-94. Springer-Verlag, 1974.

A.V. Balakrishnan. "Stochastic Optimization Theory in Hilbert Spaces - I." Journal of Applied Mathematics and Optimization. Vol. 1, Number 2, pp. 97-120. Springer-Verlag. 1974.

A.V. Balakrishnan. "White Noise versus Wiener Process Models in Filtering & Control." The Proceedings of the IFAC Symposium Stochastic Control. Budapest, September 1974. Pp. 1-2.

1975

A.V. Balakrishnan. "Identification of Systems Subject to Random State Disturbance." The Proceedings of the Fifth IFIP Conference on Optimization Techniques. Part I. Rome, Italy, 1973.R. Conti and A. Ruberti, editors. Lecture Notes in Computer Science Series, 3. Springer-Verlag, 1975. Pp. 1-19.

A.V. Balakrishnan. "Stochastic Control of Systems Governed by Partial Differential Equations." Multivariate Analysis. Vol. IV, pp. 341-349. P.R. Krishnaaih, editor. North-Holland Publishing Company, 1975.

A.V. Balakrishnan. "Identification and Stochastic Control of a Class of Distributed Systems with Boundary Noise." In: Control Theory, Numerical Methods and Computer Systems Modelling. The IRIA-IFIP International Symposium, Rocquencourt, France, 17-21 June 1974. A. Bensoussan and J.-L. Lions, editors. Lecture Notes in Economics and Mathematical Systems. Control Theory. 107. Springer-Verlag. 1975. Pp. 163-178.

A.V. Balakrishnan. "Stochastic Bilinear Partial Differential Equations." In: Variable Structure Systems with Application to Economics and Biology. The Proceedings of the Second US-Italy Seminar on Variable Structure Systems. WHERE ?? May 1974. A. Ruberti and R.R. Mohler, editors. Lecture Notes in Economics and Mathematical Systems. Systems Theory. 111. Springer-Verlag, 1975. Pp. 1-43.

A.V. Balakrishnan. "Identification-Inverse Problems for Partial Differential Equations: A Stochastic Formulations." In: Optimization Techniques: IFIP Technical Conference, Novosibirsk, 1-7 July 1974. G.I. Marchuk, editor. Lecture Notes in Computer Science. G. Goos and J. Hartmanis, editors. Vol. 27, pp. 1-12. Springer-Verlag, 1975. A.V. Balakrishnan. "White Noise versus Wiener Process." The Proceedings of the Conference on Information Sciences and Systems. Department of Electrical Engineering. The Johns Hopkins University, Baltimore, Maryland, 2-4 April 1975. Pp. 78-79.

1976

A.V. Balakrishnan. "Stochastic Filtering Theory in Hilbert Spaces." Beltrage zur Analysis. Vol. 8, 1976. Pp. 27-41.

A.V. Balakrishnan. "Stochastic Filtering and Control of Linear Systems: A General Theory." The Proceedings of ONR Conference on Control Theory of Systems Governed by Partial Differential Equations. A.K. Aziz, J.W. Wingate, and M.J. Balas, editors. New York: Academic Press, 1976. Pp. 105-118. XXXXX

1977

A.V. Balakrishnan. "Filtering and Control Problems for Partial Differential Equations." The Proceedings of the Second Kingston Conference on Differential Games and Control Theory II. University of Rhode Island, Kingston, Rhode Island, 7-10 June 1976. Emilio O. Roxin, Pan-Tai Liu (University of Rhode Island), and Robert L. Sternberg (Office of Naval Research, Boston, Massachusetts). New York and Basel: Markel Dekker, Inc., 1977. Pp. 471-485.

A.V. Balakrishnan. "Likelihood Ratios for Time-Continuous Data Models: The White Noise Approach." The Proceedings of the IRIA International Symposium on New Trends in System Analysis. Versailles, France, 13-17 December 1976. A. Bensoussan and J.-L. Lions, editors. Lecture Notes on Control and Information Sciences. 2. Springer-Verlag, 1977. Pp. 102-110.

A.V. Balakrishnan. "Radon-Nikodym Derivatives of a Class of Weak Distributions on Hilbert Spaces." Journal of Applied Mathematics and Optimization. Vol. 3, Number 2/3, pp. 209-225. Springer-Verlag, 1977.

A.V. Balakrishnan. "Space Communications." In: McGraw-Hill Encyclopedia of Science and Technology. McGraw-Hill, 1977. Pp. 622-626.

A.V. Balakrishnan. "Stochastic Filtering and Control of Linear Systems: A General Theory." In: Control Theory of Systems Governed by Partial Differential Equations. A.K. Aziz (University of Maryland, Baltimore, Maryland), J.W. Wingate (Naval Surface Weapons Center, White Oak, Silver Spring, Maryland), and M.J. Balas (C.S. Draper Laboratory, Inc., Cambridge, Massachusetts), editors. New York: Academic Press, Inc. 1977. Pp. 105-118.

A.V. Balakrishnan. "Stochastic Control of Systems Governed by Partial Differential Equations." In: Multivariate Analysis-IV. P.R. Krishnaiah, editor. North-Holland Publishing Company. 1977. Pp. 341-349. A.V. Balakrishnan. "Likelihood Ratios for Signals in White Gaussian Noise." Journal of Applied Mathematics and Optimization. Vol. 3, pp. ???. Springer-Verlag, 1977. XXXXX

A.V. Balakrishnan. "Likelihood Ratios for Signals in Additive White Noise." Journal of Applied Mathematics and Optimization. Vol. 3, Number 4, pp. 341-356. Springer-Verlag, 1977. Also in: Lietuvos Matematikos Rinkinys. XVIII (3), pp. 3-27. Vilnius, Lithuania, USSR, 1978.

A.V. Balakrishnan. "Parameter Estimation in Stochastic Differential Systems: Theory and Applications. In: Advances in Statistics, 5th Edition, P.R. Krishnaiah, editor. New York: Academic Press, 1977. Pp. ?? XXXXX

1978

A.V. Balakrishnan. "Active Control of Airfoils in Unsteady Aerodynamics." Journal of Applied Mathematics and Optimization. Vol. 4, Number 2, pp. 171-195. Springer-Verlag. 1978.

A.V. Balakrishnan. "The Kalman Filter." The Mathematical Intelligencer. Vol. 1, Number 2, pp. 90-92. PUBLISHER ??? 1978.

A.V. Balakrishnan. "A White Noise Version of the Girsanov Formula." ,,he Proceedings of the International Symposium on Stochastic Differential Equations. Kyoto, Japan. K. Ito, editor. July 1976. John Wiley, 1978. Pp. 1-19.

A.V. Balakrishnan. "Parameter Estimation in Stochastic Differential Systems: Theory and Application." In: Developments in Statistics. K. Paruchuri and P. R. Krishnaaih, editors. Academic Press, Inc. 1978. Pp. 1-32.

A.V. Balakrishnan. "On Quickest Detection of System Structure Variation." In: Recent Developments in Variable Structure Systems, Economics and Biology. The Proceedings of the U.S.-Italy Seminar. Taormina, Sicily, Italy, 29 August–2 September, 1977. R.R. Mohler and A. Ruberti, editors. Lecture Notes in Economics and Mathematical Systems. Systems Theory. 162. Springer-Verlag, 1978. Pp. 16-20.

A.V. Balakrishnan. "Identification of Distributed Parameter Systems: Non-Computational Aspects." In: Distributed Parameter Systems: Modelling and Identification. The Proceedings of the IFIP Working Conference. Rome, Italy, 21-24 June 1976. A. Ruberti, editor. Lecture Notes in Control and Information Sciences. 1. Springer-Verlag, 1978. Pp. 1-10.

A.V. Balakrishnan. "Likelihood Ratios with Gauss Measure Noise Models." The Proceedings of the Oberwolfach Conference on Measure Theory: Applications to Stochastic Analysis. Oberwolfach, West Germany, 3-9 July 1977. G. Kallianpur and D. Koelzow, editors. Lecture Notes in Mathematics. 695. Springer-Verlag, 1978. Pp. 89-100.

A.V. Balakrishnan. "Stochastic Optimization: Time-Continuous Models." The Proceedings of the Eighth IFIP Conference on Optimization Techniques. Wurzburg, West Germany, 5-9 September 1977. Part 1. J. Stoer, editor. Lecture Notes in Control and Information Sciences. 6. Springer-Verlag, 1978. Pp. 1-7.

A.V. Balakrishnan. "Boundary Control of Parabolic Equations: L-Q-R Theory." In: Theory of Nonlinear Operators. Constructive Aspects. The Proceedings of the International Summer School held in Berlin, GDR, 19-23 September 1977. Akademie-Verlag Berlin. January 1978. Pp. 11-23.

1979

A.V. Balakrishnan. "System Science Methodology in Global Modelling: System Identification." In: Global and Large Scale System Models. The Proceedings of the Center for Advanced Studies (CAS). International Summer Seminar. Dubrovnik, Yugoslavia, 21-26 August 1978. B. Lazarevic, editor. Lecture Notes in Control and Information Sciences. 19. Springer-Verlag, 1979. Pp. 1-15.

1980

A.V. Balakrishnan. "On Stochastic Bang Bang Control." Technical Note. Journal of Applied Mathematics and Optimization. Vol. 6, Number 1, pp. 91-96, Springer-Verlag, 1980.

A.V. Balakrishnan. "On Stochastic Bang-Bang Control." The Proceedings of the IFIP-WG 7/1 Working Conference on Stochastic Differential Equations: Filtering and Control., Inius, Lithuania, USSR, 28 August-2 September 1978. B. Grigelionis, editor. Lecture Notes in Control and Information Sciences. 25. Springer-Verlag, 1980. Pp. 221-238.

A.V. Balakrishnan. "Non-Linear White Noise Theory." In: Multivariate Analysis. Volume V. P.R. Krishnaiah, editor. North-Holland Publishing Company, 1980. Pp. 97-109.

A.V. Balakrishnan. "Optimal Control Problems in Aeroelasticity." The Proceedings of the Ninth IFIP Conference on Optimization Techniques. Warsaw, Poland, 4-8 September 1979. Lecture Notes in Control and Information Sciences. 22. K. Iracki, K. Malanowski, and S. Walukiewicz, editors. Springer-Verlag, 1980. Pp. 1-13.

A.V. Balakrishnan. "Non-Linear Filtering: White Noise Model." The Proceedings of the International Conference on Analysis and Optimization of Stochastic Systems. University of Oxford, 6-8 September 1978. O.L.R. Jacobs et al., editors. Academic Press, 1980. Pp. 361-371.

A.V. Balakrishnan and John W. Edwards (NASA Dryden Flight Research Center). "Calculation of the Transient Motion of Elastic Airfoils Forced by Control Surface Motion and Gusts." NASA Technical Memorandum 81351. August 1980. Corrected June 1997. Pp. i-ii, 1-91.

A.V. Balakrishnan. "On a Class of Riccati Equations in a Hilbert Space." Journal of Applied Mathematics and Optimization. Vol. 7, Number 2, pp. 159-174. Springer-Verlag, 1981.

A.V. Balakrishnan. "Strong Stabilizability and the Steady State Ricatti Equation." Journal of Applied Mathematics and Optimization. Vol. 7, Number 4, pp. 335-345. Springer-Verlag, 1981.

A.V. Balakrishnan. "A Likelihood Ratio Formula for Random Fields with Application to Physical Geodesy." Journal of Applied Mathematics and Optimization. Vol. 8. Number 1, pp. 97-102. Springer-Verlag, 1981.

A.V. Balakrishnan. "Some Estimation Problems for Random Fields." In: C.R. Rao: Honorary Volume. P.R. Krishnaiah et al., editors. Academic Press, 1981. Pp. ???

A.V. Balakrishnan. "Likelihood Ratios and Kalman Filtering for Random Fields." The Proceedings of the Third IFIP-WG 7/1 Working Conference on Stochastic Differential Systems. Visegrad, Hungary, 15-20 September 1980. Lecture Notes in Control and Information Sciences. 36. M. Arato, D. Vermes, and A.V. Balakrishnan, editors. Springer-Verlag, 1981. Pp. 1-16.

1982

A.V. Balakrishnan. "Some Estimation Problems for Random Fields." In: Statistics and Probability: Essays in Honor of C.R. Rao. G. Kallianpur, P.R. Krishnaiah, and J.K. Ghosh, editors. North-Holland Publishing Company, 1982. Pp. 45-57.

1983

A.V. Balakrishnan. "On Abstract Stochastic Bilinear Equations with White Noise Inputs." Journal of Applied Mathematics and Optimization. Vol. 10, Number 4, pp. 351-366. Springer-Verlag, 1983.

1984

A.V. Balakrishnan and Lawrence W. Taylor, Jr. (Spacecraft Control Branch, NASA Langley Research Center). "A Mathematical Problem and a Spacecraft Control Laboratory Experiment (SCOLE) Used to Evaluate Control Laws for Flexible Spacecraft... NASA/IEEE Design Challenge." The Proceedings of the Third Annual NASA SCOLE Workshop. NASA, June 1984. Pp. 386-412.

A.V. Balakrishnan. "A Mathematical Formulation for the Control of the SCOLE Configuration." The Proceedings of NASA Langley Workshop. December 1984. Pp. 1-26.

A.V. Balakrishnan. "A Mathematical Formulation of the SCOLE Control Problem: Part I." The Proceedings of the NASA Langley Workshop. NASA Contractor Report 172581. May 1985. Revised 10 July 1985. Pp. 1-55.

A.V. Balakrishnan. "A Mathematical Formulation of a Large Space Structure Control Problem." The Proceedings of the 24th IEEE Conference on Decision and Control. Fort Lauderdale, Florida, 11-13 December 1985. Pp. 1-5. IEEE 85CH2245-9, Vol. 3, pp. 1989-1993 (December 1985).

1986

A.V. Balakrishnan. "Active Stability Augmentation of Large Space Structures: A Stochastic Control Problem." Presented at the IFAC Conference on Stochastic Control. Vilnius, Lithuania, 19-23 May 1986.

A.V. Balakrishnan. "On a Class of Stochastic Differential Equations Which do not Satisfy Lipschitz Conditions." The Proceedings of the Third Ban Honnef Conference on Stochastic Differential Systems. 3-7 June 1985. Bonn, West Germany. N. Christopeit, K. Helmes, and M. Kohlmann, editors. Lecture Notes in Control and Information Systems. 78. Springer-Verlag, 1986. Pp. 27-35.

A.V. Balakrishnan. "A Note on the Marchuk-Zuev Identification Problem." In: Vistas in Applied Mathematics. Numerical Analysis, Atmospheric Sciences, Immunology. A.V. Balakrishnan, A.A. Dorodnitsyn, and J.-L. Lions, editors. New York: Optimization Software, Inc. Publications Division, 1986. Pp. 291-298.

A.V. Balakrishnan. "Minimal Time Detection of Parameter Change in a Counting Process." In: Stochastic Programming. F. Archetti, G. DiPillo, and M. Lucertini, editors. Lecture Notes in Control and Information Sciences. 76. Springer-Verlag, 1986. Pp. 1-12.

1987

A.V. Balakrishnan. "On a Large Space Structure Control Problem." In: Control Problems for Systems Described by Partial Differential Equations and Applications. The Proceedings of IFIP-WG 7.2 Working Conference. Gainesville, Florida. 3-6 February 1986. I. Lasiecka and R. Triggiani, editors. Lecture Notes in Control and Information Sciences. 97. Springer-Verlag, 1987. Pp. 3-15.

A.V. Balakrishnan. "Stability Enhancement of Flexible Structures by Nonlinear Boundary-Feedback Control." In: Boundary Control and Boundary Variations. The Proceedings of IFIP-WG 7.2 Conference. Nice, France. 10-13 June 1987. J.P. Zolesio, editor. Lecture Notes in Control and Information Sciences. 100. Springer-Verlag, 1987. Pp. 18-37.

A.V. Balakrishnan. "Some Nonlinear Damping Models in Flexible Structures." The Proceedings of the Fourth Annual SCOLE Workshop. Held at the USAF Academy, Colorado Springs, Colorado, 16 November 1987. NASA-TM-101503. Lawrence W. Taylor, editor. NASA. Pp. 1-11.

A.V. Balakrishnan. "A Random Schroedinger Equation: White Noise Model." Differential and Integral Equations. Vol. 1, Number 1, pp. 49-70. January 1988. (missing 10 pages)

A.V. Balakrishnan. "A Theory of Nonlinear Damping in Flexible Structures." The Proceedings of the COMCON Workshop on Stabilization of Flexible Structures. Montpellier, France, December 1987. A.V. Balakrishnan and J.-P. Zolesio, editors. New York: Optimization Software, Inc., Publications Division, 1988. Pp. 1-12.

A.V. Balakrishnan. "On the Application of Kalman Filtering to Correct Errors Due to Vertical Deflection in Inertial Navigation." In: Nonlinear Time Series and Signal Processing. R.R. Mohler, editor. Lecture Notes in Control and Information Sciences. 106. Springer-Verlag, 1988. Pp. 1-9.

A.V. Balakrishnan. "Control of Flexible Flight Structures." In: Analyse Mathematique et Applications. F. Murat and O. Pironneau, editors. Paris: Gauthiers-Villars, 1988. Pp. 23-38?? XXXXX

A.V. Balakrishnan. "A Mathematical Formulation of the SCOLE Control Problem." Part II. Optimal Compensator Design." NASA Contractor Report 181720. December 1988. Pp. ???

1989

A.V. Balakrishnan. "Minimum Attainable RMS Attitude Error Using Co-located Rate Sensors." The Proceedings of the Third Annual Conference on Aerospace Computational Control. Oxnard, California, August 1989. Vol. 1. D.E. Bernard and G.K. Man, editors. JPL Publication 89-45. December 1989. Pp. 448-459. 9.

A.V. Balakrishnan. "Compensator Design for Stability Enhancement with Collocated Controllers." Presented at the IFAC Conference on Control of Distributed Parameters Systems. Perpignan, France, June 1989. Pp. ???

1990

A.V. Balakrishnan. "Damping Operators in Continuum Models of Flexible Structures: Explicit Models for Proportional Damping in Beam Torsion." Journal of Differential and Integral Equations. Vol. 3, Number 2, pp. 381-396. March 1990.

A.V. Balakrishnan. "Damping Operators in Continuum Models of Flexible Structures." The Fifth Annual NASA Spacecraft Control Laboratory Experiment (SCOLE) Workshop. Proceedings of a workshop sponsored by the National Aeronautics and Space Administration and held at the Hilton Lodge, Lake Arrowhead, California, 31 October 1988. Compiled by Lawrence W. Taylor, Jr. (Langley Research Center, Hampton, Virginia). NASA Conference Publication 10057, Part 1. December 1990. Pp. 39-63.

A.V. Balakrishnan. "Damping Operators in Continuum Models of Flexible Structures: Explicit Models for Proportional Damping in Beam Bending with End-Bodies." Journal of Applied Mathematics and Optimization. Vol. 21, pp. 315-334. Springer-Verlag, 1990.

A.V. Balakrishnan. "Combined Structure-Controls-Integrated Optimization Using Distributed Parameter Models." The Proceedings of the NASA-UCLA Workshop on Computational Techniques in Identification and Control of Flexible Flight Structures. Lake Arrowhead, California, 2-4 November 1989. A.V. Balakrishnan, editor. New York-Los Angeles: Optimization Software, Inc., Publications Division. 1990. Pp. 70-86. XXXX

A.V. Balakrishnan. "Modelling and Control of Large Space Structures." The Proceedings of the IFIP TC-7 Conference: Modelling the Innovation: Communications, Automation and Information Systems. M. Carnevale, M. Lucertini, and S. Nicosia, editors. Elsevier Science Publishers B.V. (North-Holland), 1990. Pp. 461-469.

A.V. Balakrishnan. "Stochastic Regular Theory for a Class of Hyperbolic Systems." The Proceedings of the Conference on Stochastic Partial Differential Equations and Applications. III. 7-12 January 1990, Trento, Italy. Lecture Notes??? . Springer-Verlag, 1990. ???? XXXXX 18 pages?

1991

A.V. Balakrishnan. "A Continuum Model for Interconnected Lattice Trusses." The Proceedings of the Eighth VPI & SU Symposium on Dynamics and Control of Large Structures, Blacksburg, Virginia, 6-8 May 1991. L. Meirovitch, editor, 1991. Pp. 479-489.

A.V. Balakrishnan. "Stochastic Regulator Theory for a Class of Abstract Wave Equations." J. SIAM on Control and Optimization. Vol. 29, Number 6, pp. 1288-1299. November 1991.

A.V. Balakrishnan. "Attitude Error Response of Structures to Actuator/Sensor Noise." The Proceedings of the 1991 American Control Conference. American Automatic Control Council. Vol. 2, pp. 1453-1458. 1991.

A.V. Balakrishnan. "Combined Structures-Controls-Integrated Optimization Using Distributed Parameter Models." Computational Mechanics. Vol. 8, pp. 125-133. Springer-Verlag, 1991.

A.V. Balakrishnan. "Feedback Control for Stabilization of Flexible Multibody Structures." In: Differential Equations: Stability and Control. Lecture Notes in Pure and Applied Mathematics. Vol. 127. Saber Elaydi, editor. Marcel Dekker, Inc., 1991. Pp. 11-37. A.V. Balakrishnan. "Compensator Design for Stability Enhancement with Collocated Controllers." The IEEE Transactions on Automatic Control. Vol. 36. Number 9, pp. 994-1007. September 1991.

A.V. Balakrishnan. "Modes of Interconnected Lattice Trusses Using Continuum Models. Part 1." NASA Contractor Report 189568, December 1991. Pp. ??? XXXXX or? NAS1-19158. 1991.

1992

A.V. Balakrishnan. "Two Examples of Physically Realizable Processes Whose Spectral Density is Not 'Physically Realizable'." In: Probability in the Engineering and Informational Sciences. Vol. 6, pp. 257-259. Cambridge University Press, 1992.

A.V. Balakrishnan. "Bounds on Noise Response of Structures." In: Computational Mechanics. Vol. 9, pp. 375-389. Springer-Verlag, 1992.

A.V. Balakrishnan. "Combined Structures-Controls Optimization of Lattice Trusses." Computer Methods in Applied Mechanics and Engineering. Vol. 94, pp. 131-152. Elsevier Science Publishers B.V., 1992.

A.V. Balakrishnan. "White Noise Theory: An Engineering Perspective." In: Theory of Differential Equations and Applications to Oceanography. The Proceedings of the International Conference, organized by the Department of Mathematics Goa University, held at Taleigao Plateau, Goa, India, 17-21 December 1990. S.G. Deo and Y.S. Prahalad (GOA University), editors. New Deli: Affiliated East-West Press Private, Limited, 1992. Pp. 1-18.

A.V. Balakrishnan. "Stochastic Partial Differential Equations in Control of Structures." The Proceedings of IFIP-WG 7/1 International Conference on Stochastic Partial Differential Equations and Their Applications. University of North Carolina at Charlotte, NC, 6-8 June1991.
B.L. Rozovskii and R.B. Sowers, editors. Springer-Verlag, 1992. Pp. 12-21.

A.V. Balakrishnan. "Stochastic Regulator Theory for a Class of Hyperbolic Systems." In: Stochastic Partial Differential Equations and Applications. G.D. Prato and L. Tubaro, editors. Series Pitman Research Notes in Mathematics, 268. Longman Scientific and Technical, Essex, United Kingdom. New York: John-Wiley & Sons, 1992. Pp. 19-36. XXXXX

1993

A.V. Balakrishnan. "Compensator Design for Stability Enhancement with Collocated Controllers: Explicit Solutions." The IEEE Transactions on Automatic Control. Vol. 38, Number 3, pp. 505-507. March 1993.

A.V. Balakrishnan. "Semigroup Theory and Control Theory." In: Mathematical Theory of Control. Mohan C. Joshi and A.V. Balakrishnan, editors. Based on the proceedings from the International Conference on Mathematical Theory of Control, held at the Indian Institute of Technology, Bombay, 10-15 December 1990. Series Lecture Notes in Pure and Applied Mathematics. Vol. 142. New York: Marcel Dekker, Inc., 1993. Pp. 11-20.

A.V. Balakrishnan. "On the Wittrick-Williams Algorithm for Modes of Flexible Structures." In: Optimization Methods and Software. Vol. 2, pp. 177-187. Gordon and Breach Science Publishers, S.A., 1993.

A.V. Balakrishnan. "An Infinite-Dimensional Gaussian Markov Process with Nonnuclear Steady State Covariance." In: Theory of Probability and Applications. Vol. 38, Number 3, pp. 516-519. 1993. Translated from the Russian language in: Journal Teoriya Veroyatnostei I ee Primeneniya. Published by SIAM Publications, 1993.

A.V. Balakrishnan. "An Explicit Solution to the Optimal LQG Problem for Flexible Structures with Collocated Rate Sensors." The Proceedings of the Fifth NASA/DoD Controls-Structures Interaction Technology Conference. Jerry R. Newsome, editor. NASA Conference Publication 3177. Part 2. NASA, 1993. Pp. 475-488.

A.V. Balakrishnan. "Explicit Solution of LQG Compensator Design Problem for Flexible Structures with Collocated Rate Sensors." In: Vibration and Control of Mechanical Systems. The ASME 14th Biennial Conference on Mechanical Vibration and Noise. Albuquerque, New Mexico. C.A. Tan and L.A. Bergman, editors. Differential Equations. Vol. 61. ASME, 1993. Pp. 3-10.

A.V. Balakrishnan and R. Triggiani. "Lack of Generation of Strongly Continuous Semigroup by the Damped Wave Operator on H x H (or the Little Engine That Couldn't)." Applied Mathematics, Letters. Vol. 6, Number 6, pp. 33-37. Elsevier Science Ltd., 1993.

A.V. Balakrishnan. "Explicit LQG Optimized Control Laws for Flexible Structures/Collocated Rate Sensors." In: The 34th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference: AIAA/ASME Adaptive Structures Forum. La Jolla, California, 19-22 April, 1993. AIAA-93-1657, 1993. Pp. 3108-3114. XXXXX

1994

A.V. Balakrishnan. "Laser Beam Log Amplitude Temporal Scintillation Spectrum Due to Crosswind." In: The Proceedings of the NASA-UCLA Workshop on Laser Propagation in Atmospheric Turbulence. 1-3 February 1994. A.V. Balakrishnan and Russell Butts (U.S. Air Force Phillips Laboratory, Kirtland AFB, New Mexico). New York Los Angeles, California. Optimization Software, Inc., Publications Division, 1994. Pp. 1-33.

A.V. Balakrishnan. "Shape Control of Plates with Piezo Actuators and Collocated Position/Rate Sensors." In: Applied Mathematics and Computation. Vol. 63, pp. 213-234. New York: Elsevier Science, Inc., 1994.

A.V. Balakrishnan. Robustness Properties of LQG Optimized Compensators for Collocated Rate Sensors." In: NASA Workshop on Distributed Parameter Modeling and Control of Flexible Aerospace Systems." 8-10 June 1992, Williamsburg, Virginia. Compiled by Virginia B. Marks and Claude R. Keckler (Langley Research Center, Hampton, Virginia), editors. NASA Conference Publications 3242. June 1994. Pp. 445-463.

A.V. Balakrishnan. "LQG Optimal Compensator Transfer Function for the NASA LaRC CSI Evolutionary Model." In: NASA Workshop on Distributed Parameter Modeling and Control of Flexible Aerospace Systems." 8-10 June 1992, Williamsburg, Virginia. Compiled by Virginia B. Marks and Claude R. Keckler (Langley Research Center, Hampton, Virginia), editors. NASA Conference Publications 3242. June 1994. Pp. 465-481.

1995

A.V. Balakrishnan. "On a Generalization of the Kalman-Yakubovic Lemma." Journal of Applied Mathematics and Optimization. Vol. 31, pp. 177-187. Springer-Verlag, 1995.

A.V. Balakrishnan. "Generalization of the Wittrik-Williams Formula for Counting Modes of Flexible Structures." Journal of Guidance, Control, and Dynamics. Vol. 18, Number 6, pp. 1410-1415. American Institute of Aeronautics and Astronautics, Inc., November-December 1995.

1996

A.V. Balakrishnan. "Robust Stabilizing Compensators for Flexible Structures with Collocated Controls." Journal of Applied Mathematics and Optimization. Vol. 33, pp. 35-60. Springer-Verlag, 1996.

A.V. Balakrishnan. "On Superstable Semigroups of Operators." In: Dynamic Systems and Applications. Vol. 5, pp. 371-384. Dynamic Publishers, Inc., 1996.

1997

A.V. Balakrishnan. "Vibrating Systems with Singular Mass-Inertia Matrices." In: The Proceedings of the First International Conference on Nonlinear Problems in Aviation and Aerospace. 9-11 May 1996, Daytona Beach, Florida. S. Sivasundaram, editor. Embry-Riddle Aeronautical University Press, 1997. Pp. 23-32. XXXXX

A.V. Balakrishnan. "Performance Limitations of Strain Actuated Beams: Theory." Presented at the 11th VPI & SU Symposium on Structural Dynamics and Control. 12-14 May 1997, Blacksburg, Virginia. Abstract.

J. Lin, O.S. Alvarez-Salazar, A.V. Balakrishnan (Flight Systems Research Center, UCLA), and K.W. Iliff (Dryden Flight Research Center, NASA Edwards AFB, California). "Performance Limitations of Strain Actuated Beams: Theory." In: The Proceedings of the 11th VPI & SU Symposium on Structural Dynamics and Control. 12-14 May 1997, Blacksburg, Virginia. L. Meirovitch, editor. 1997. Pp. 409-418.

A.V. Balakrishnan. "Smart Structures and Super Stability." In: Computational Science for the 21st Century. M-O Bristeau (INRIA Rocquencourt, Le Chesnay, France), G. Etgen (University of Houston, USA), W. Fitzgibbon (University of Houston, USA), J.L. Lions (College de France, Paris, France), Jacques Periaux (Dassault Aviation, Saint Cloud, France), and M.F. Wheeler (University of Texas at Austin, USA), editors. Chichester, England, U.K.: John Wiley & Sons, Ltd. 1997. Pp. 660-669.

A.V. Balakrishnan. "Theoretical Limits of Damping Attainable by Smart Beams with Rate Feedback." In: Smart Structures and Materials 1997: Mathematics and Control in Smart Structures. The Proceedings of SPIE (International Society for Optical Engineering), 3-6 March 1997, San Diego, California. Vasundara V. Varadan and Jagdish Chandra, editors. SPIE. Vol. 3039. PUBLISHER??? March 1997. Pp. 204-215.

1998

A.V. Balakrishnan. "Dynamics and Control of Articulated Anisotropic Timoshenko Beams." In: Dynamics and Control of Distributed Systems. H.S. Tzou and L.A. Bergman, editors. Cambridge University Press, 1998. Pp. 121-201.

A.V. Balakrishnan. "Spectral Density of Laser Beam Scintillation in Wind Turbulence: I. Theory." Computational and Applied Mathematics. Vol. 17, Number 2, pp. 173-199. Rio de Janeiro, Brazil: Sociedade Brasileira de Matematica Aplicada e Computacional, 1998.

A.V. Balakrishnan. "Aeroelastic Control with Self-Straining Actuators: Continuum Models." In: Smart Structures and Materials 1998: Mathematics and Control in Smart Structures. The Proceedings of SPIE (International Society for Optical Engineering). San Diego, California, 2-5 March 1998, . Vasundaran V. Varadan, editor. SPIE. Vol. 3323. Pp. 44-54. 1998.

1999

A.V. Balakrishnan. "On Superstability of Semigroups." Presented at the 18th IFIP TC-7 Conference on System Modelling and Optimization, July 1997. In: The Proceedings of the 18th IFIP TC-7 Conference of Systems Modeling and Optimization. M.P. Polis, A.L. Dontchev, P. Kall, I. Lasiecka, and A.W. Olbrot, editors. Chapman and Hall/CRC Research Notes in Mathematics. 1999. Pp. 12-19.

A.V. Balakrishnan. "Aeroelastic Control with Self-Straining Actuators." The Proceedings of the Second International Conference on Nonlinear Problems in Aviation & Aerospace. Volume 1. Seenith Sivasundaram, editor. Cambridge, U.K.: European Conference Publications. 1999. Pp. 45-61.

A.V. Balakrishnan. "Damping Performance of Strain Actuated Beams." Computational and Applied Mathematics. Vol. 18, Number 1, pp. 37-87. SBMAC, 1999.

A.V. Balakrishnan. "Unsteady Aerodynamics – Subsonic Compressible Inviscid Case." NASA Contractor Report, NASA/CR-1999-206583. 1999.

2000

A.V. Balakrishnan. "Semigroup Theory in Aeroelasticity." In: The Proceedings of the International Conference on Semigroups of Operators: Theory and Applications. 14-18 December 1998, Newport Beach, California. A.V. Balakrishnan, editor. Progress in Nonlinear Differential Equations and Their Applications. Vol. 42. Basel, Switzerland: Birkhauser Verlag. 2000. Pp. 15-24.

A.V. Balakrishnan. "13 Control of Structures with Self-Straining Actuators: Coupled Euler/ Timoshenko Model: I." In: Nonlinear Problems in Aviation and Aerospace. S. Sivasundaram (Embry-Riddle Aeronautical University, Daytona Beach, Florida), editor. Reading, U.K.: Gordon and Breach Science Publishers, 2000. Pp. 179-194.

A.V. Balakrishnan. "Representing the Convolution-Evolution Equation of Aeroelasticity as a Pure Semigrop Equation. Presented at ICNPAA 2000, The Third International Conference on Nonlinear Problems in Aviation and Aerospace, Daytona Beach, Florida, May 2000.

A.V. Balakrishnan. "On a Convolution – Evolution Equation in Aeroelasticity: Evolution Equations Applications to Physics, Industry, and Life Sciences." M. Ianelli and G. Lumer, editors. Birkhauser, 2000. Pp. ????

A.V. Balakrishnan. "A General Formulation and Solution of the A-O Control Problem." December 2000.

2001

A.V. Balakrishnan. "Subsonic Flutter Suppression Using Self-Straining Actuators.", Journal of the Franklin Institute. Special Issue on Control. F. Udwadia (USC), editor. Vol. 338, Number 2/3, pp. 149-170. Elsevier Science, Ltd, 2001.

A.V. Balakrishnan. "Smart Structures and Super Stability." In: Evolution Equations and Their Application in Physical and Life Sciences. The Proceedings of the Bad Herrenalb (Karlsruhe), Germany, Conference. Gunter Lumer (University of Mons-Hainaut, Mons, Belgium and International Solvay Institutes for Physics and Chemistry, Brussels, Belgium) and Lutz Weis (University of Karlsruhe, Karlsruhe, Germany), editors. Lecture Notes in Pure and Applied Mathematics. Vol. 215. New York – Basel, Switzerland: Marcel Dekker, Inc., 2001. Pp. 43-53.

2002

A.V. Balakrishnan. "AFT: Aeroelastic Flight Test NASA-UCLA 1999. The Proceedings of the ICNPAA-2000: Third International Conference on Nonlinear Problems in Aviation & Aerospace.S. Sivasundaram, editor. European Conference Publication, U.K. 2002.

A.V. Balakrishnan, Marianna Shubov, Cheryl A. Peterson, and Cynthia A. Martin (Texas Tech University, Lubbock, Texas). "Asymptotic and Spectral Results for Non-Self-Adjoint Large Operators Generated by Coupled Euler-Bernoulli and Large Timoshenko Beam Model." The Proceedings of the Second International Conference on Semigroups of Operators, Rio de Janeiro, Brazil. 10-14 September 2001. C. Kubrusly, N. (Pontifica Universidad Catholica, Rio de Janeiro, Brazil), Nhan Levan (UCLA), and M. da Silveira (Pontifica Universidad Catholica, Rio de Janeiro, Brazil), editors. New York Los Angeles: Optimization Software, Inc., Publications Division, 2002. Pp. 15-31.

2003

A.V. Balakrishnan. "On a Convolution-Evolution Equation in Aeroelasticy: Evolution Equations Applications to Physics, Industry and Life Sciences." In: The Proceedings of the Seventh International Conference on Evolution Equations. 30 October – 4 November 2000. Levico Terme, Trento, Italy. M. Ianelli and G. Lumer, editors. Progress in Nonlinear Differential Equations and Their Applications. Vol. 55, pp. 61-82. Basel, Switzerland: Birkhauser Verlag, 2003.

A.V. Balakrishnan. "On the (Non-Numeric) Mathematical Foundations of Linear Aeroelasticity." The Proceedings of the Fourth International Conference on Nonlinear Problems in Aviation & Aerospace. May 2002, Melbourne, Florida. S. Sivasundaram, editor. U.K.: European Conference Publications. 2003. Pp. 11-41.

A.V. Balakrishnan. "Possio Integral Equation of Aeroelasticity Theory." Journal of Aerospace Engineering (ASCE). Vol. 16, Number 4, pp. 139-154. October 2003.

2004

A.V. Balakrishnan. "On the Transonic Small Disturbance Potential Equation." AIAA Journal. Vol. 42, Number 6, pp. 1081-1088. June 2004.

A.V. Balakrishnan and Marianna A. Shubov (Texas Tech University, Lubbock, Texas). "Asymptotic and Spectral Properties of Operator-Valued Functions Generated by Aircraft Wing Model." Mathematical Methods in the Applied Sciences. Vol. 27, pp. 329-362. John Wiley & Sons, Ltd., 2004.

A.V. Balakrishnan and Marianna A. Shubov (Texas Tech University, Lubbock, Texas). "Asymptotic Behaviour of the Aeroelastic Modes for an Aircraft Wing Model in a Subsonic Air Flow." The Proceedings of the Royal Society of London A: Mathematical, Physical and Engineering Sciences. Vol. 460, Number 2044, pp. 1057-1091. April 2004.

A.V. Balakrishnan, Marianna A. Shubov, and Cheryl A. Peterson (Texas Tech University, Lubbock, Texas). "Spectral Analysis of Coupled Euler-Bernoulli and Timoshenko Beam Model." ZAMM Journal of Applied Mathematics and Mechanics / Zeitschrift fur Angewandte Mathematik und Mechanik. Vol. 84, Number 5, pp. 291-313. John Wiley, 2004.

2005

A.V. Balakrishnan. "Superstability of Systems." Presented at the 12th International Workshop on Dynamics and Control. 19-21 August 2002. Los Angeles. In: Applied Mathematics and Computation. Vol. 164, pp. 321-326. 2005.

A.V. Balakrishnan. "The Possio Integral Equation of Aeroelasticity: A Modern View. In: System Modeling and Optimization, pp. 15-22.

A.V. Balakrishnan. "Toward a Mathematical Theory of Aeroelasticity." In: The Proceedings of the 21st IFIP TC-7 Conference on System Modeling and Optimization. Sophia Antipolis, France, 21-25 July 2003. In: Johh Cagnol and Jean-Paul Zolesio, editors. New York: Springer, 2005.

2006

A.V. Balakrishnan. "Modeling Response of Flexible High-Aspect-Ratio Wings to Wind Turbulence." In: Journal of Aerospace Engineering (ASCE). Vol. 19, Number 2, 121-132. April 2006.

A.V. Balakrishnan. "Nonlinear Aeroelasticity: Continuum Theory. Flutter/Divergence Speed, and Plate Wing Model. In: Journal of Aeroelasticity Engineering. Vol. 19, Number 3, pp. 194-202. 2006.

A.V. Balakrishnan. "The Possio Integral Equation of Aeroelasticity: A Modern View." In: System Modeling and Optimization. The Proceedings of the IFIP International Federation for Information Processing. Turin, Italy July 2005. F. Ceragioli, A. Dontschev, H. Furuta, K. Marti, and L. Pandolfi, editors. Vol. 199, pp. 15-22. New York: Springer. 2006.

A.V. Balakrishnan. "Transonic Flutter. Divergence Speeds for Uniform High-Aspect Ratio Straight Wings of Non-Zero Thickness in Inviscid Flow." In: Free and Moving Boundaries: Analysis, Stimulation and Control. J.-P. Zolesio and R. Glowinski, editors. Series: Lecture Notes in Pure and Applied Mathematics. Chapman and Hall. 2006. Pp.????

A.V. Balakrishnan and K. W. Iliff (NASA Dryden Flight Research Center, California). "A Continuum Aeroelastic Model for Inviscid Subsonic Bending-Torsion Wing Flutter." In: The Proceedings of the International Forum on Aeroelasticity and Structural Dynamics. Marriott Hotel, Amsterdam, the Netherlands, 4-6 June 2003. (Corrections added January 2004). Journal of Aerospace Engineering. Vol. 20, Number 3, pp. 152-164. July 2007.

A.V. Balakrishnan. "An Integral Equation in Aeroelasticity." In: The Proceedings of EVEQ. F. Neubrander, editor. 2006.

A.V. Balakrishnan. "An Integral Equation in Aeroelasticity." In: Functional Analysis and Evolution Equations. The Gunter Lumer Volume. H. Amann, W. Arendt, M. Hieber, F. Neubrander, S. Nicaise, and J. von Below, editors. Basel, Switzerland: Birkhauser. 2007, pp. 51-65.

A.V. Balakrishnan. "A Mathematical Theory of Flutter Instability Phenomena in Aeroelasticity." Presented at the Ninth International Chetayev Conference on Analytical Mechanics, Stability and Control in Motion Institute for System Dynamics and Control Theory of SB RAS, Irkutsk, Russia. 2007. Pp. 15-32. In English.

A.V. Balakrishnan. "Nonlinear Aeroelastic Theory: Continuum Models." In: Control Methods in PDF-Dynamical Systems. F. Ancona, I. Lasiecka, W. Littman, and R. Triggiani, editors. Series: Contemporary Mathematics 426. Providence, Rhode Island: American Mathematical Society. 2007. Pp. 79-101.

A.V. Balakrishnan. "Flutter LCO in Isentropic Flow: Analytical Theory." Presented at Japan-US Workshop: Recent Advances in Multidisciplinary Technology and Modeling. University of Tokyo, 23-25 May 2007. In: Journal of Fluids and Structures. June 2007.

2008

A.V. Balakrishnan. "Nonlinear Aeroelasticity: The Steady State Theory." In: AIAA Journal. Vol. 46, Number 1, pp. 177-184. January 2008.

A.V. Balakrishnan and Marianna A. Shubov. "Reduction of Boundary Value Problem to Possio Integral Equation in Theoretical Aeroelasticity. In: Journal of Applied Mathematics. Vol. 2008, pp. 1-27. 2008.

2009

A.V. Balakrishnan/ "Aeroelastic Stability in Viscous Flow." AMS Regional Meeting. 26-27, 2009, San Francisco, California. Abstract.

A.V. Balakrishnan. "Nonlinear Possio Integral Equation and Aeroelastic Flutter Limit Cycle Oscillation. In: Nonlinear Studies. Vol. 16, Number 2, pp. 95-118. Florida, USA: I & S Publishers. 2009. A.V. Balakrishnan. "Analytical Solution of the Possio Integral Equation for the Sonic Case." In: Journal of Aerospace Engineering. Vol. 22, Number 4, pp. 434-437. 2009.

A.V. Balakrishnan. "The Transonic Dip in Divergence Speed – An Explicit Formula. October 16, 2009. Pp. 1-16. ??????

2010

A.V. Balakrishnan. "State Space Representation of Flexible Structure Dynamics in Air Flow. In: Journal of the Franklin Institute. Vol. 347, Number 1, pp. 17-29. 2010.

2011

A.V. Balakrishnan and R.R. Mazumdar. "On Powers of Gaussian White Noise." In: The IEEE Transactions on Information Theory. Vol. 57, Number 11, pp. 7629-7634. 2011.

2012

2013

A.V. Balakrishnan. "Continuum Aeroelastic Analysis of an Articulated Slender Beam in Isentropic Air Flow, Part I: Divergence Speed. ????

2014

A.V. Balakrishnan, A.M. Tuffaha, I. Patino, and O. Melnikov. "Flutter Analysis of an Articulated High Aspect Ration Wing in Subsonic Airflow." In: Journal of the Franklin Institute. Vol. 351, Number 8, pp. 4230-4250. 2014.

CHECK

A.V. Balakrishnan. Dynamics of Anisotropic Timoshenko Beams and Distributed Controls. In:

A.V. Balakrishnan and J. Lin (UCLA). "Aerodynamic Lift and Moment Calculations Using a Closed-Form Solution of the Possio Equation." In: Journal of Aircraft ...???

A.V. Balakrishnan. "Estimation of Wind Profiles from Laser Beam Propagation Distortion: Modeling, Control and Identification of Flight Vehicles."

A.V. Balakrishnan. Aeroelastic Control with Self-Straining Actuators: Unsteady Aerodynamic Solution. Unpublished manuscript.