

Refereed Journal Publications

- (1) H. Winkler: Integral representations for stochastic processes with n -th stationary increments. *Math. Nachr.* 163 (1993), 35 - 44.
- (2) H. Winkler: The inverse spectral problem for canonical systems. *Integral Equations Oper. Theory* 22 (1995), 360 - 374.
- (3) H. Winkler: On transformations of canonical systems. *Oper. Theory Adv. Appl.* 80 (1995), 276 - 288.
- (4) H. Langer, H. Winkler: Direct and inverse spectral problems for generalized strings. *Integral Equations Oper. Theory* 30 (1998), 409 - 431.
- (5) H. Winkler: Canonical systems with a semibounded spectrum. *Oper. Theory Adv. Appl.* 106 (1998), 397 - 417.
- (6) S. Hassi, H.S.V. de Snoo, H. Winkler: Boundary-value problems for two-dimensional canonical systems. *Integral Equations Oper. Theory* 36 (2000), 445 - 479.
- (7) H. Winkler: Spectral estimations for canonical systems. *Math. Nachr.* 220 (2000), 115 - 141.
- (8) H. Winkler: Small perturbations of canonical systems. *Integral Equations Oper. Theory* 38 (2000), 222 - 250.
- (9) H. Winkler: On generalized Friedrichs and Kreĭn-von Neumann extensions and canonical systems. *Math. Nachr.* 236 (2002), 175 - 191.
- (10) A. Sandovici, H.S.V. de Snoo, H. Winkler: The structure of linear relations in Euclidean spaces. *Linear Algebra Appl.* 397 (2005), 141 - 169.
- (11) H.S.V. de Snoo, H. Winkler: Two-dimensional trace-normed canonical systems of differential equations and selfadjoint interface conditions. *Integral Equations Oper. Theory* 51 (2005), 73 - 108.
- (12) H.S.V. de Snoo, H. Winkler: Canonical systems of differential equations with selfadjoint interface conditions on graphs. *Proc. Roy. Soc. Edinburgh Sect. A* 135 (2005), 297 - 315.
- (13) M. Kaltenbäck, H. Winkler, H. Woracek: Almost Pontryagin spaces. *Oper. Theory Adv. Appl.* 160 (2005), 253 - 271.
- (14) M. Kaltenbäck, H. Winkler, H. Woracek: Symmetric relations of finite negativity. *Oper. Theory Adv. Appl.* 162 (2005), 191 - 210.
- (15) A. Fleige, S. Hassi, H.S.V. de Snoo, H. Winkler: Generalized Friedrichs extensions associated with interface conditions for Sturm - Liouville operators. *Oper. Theory Adv. Appl.* 163 (2005), 135 - 145.
- (16) M. Kaltenbäck, H. Winkler, H. Woracek: Singularities of generalized strings. *Oper. Theory Adv. Appl.* 163 (2005), 191 - 248.
- (17) M. Kaltenbäck, H. Winkler, H. Woracek: Generalized Nevanlinna functions with essentially positive spectrum. *J. Oper. Theory* 55 (1) (2006), 17 - 48.

- (18) S. Hassi, A. Sandovici, H.S.V. de Snoo, H. Winkler: Form sums of non-negative selfadjoint operators. *Acta Math. Hungar.* 111 (1-2) (2006), 81 - 105.
- (19) S. Hassi, H.S.V. de Snoo, A.E. Sterk, H. Winkler: Non-standard boundary conditions for a class of Sturm-Liouville operators. *Rev. Roumaine Math. Pures Appl.* 51 (2006), 641 - 653.
- (20) M. Kaltenbäck, H. Winkler: H. Woracek: De Branges spaces of entire functions symmetric about the origin. *Integral Equations Oper. Theory* 56 (2006), 483 - 509.
- (21) S. Hassi, H.S.V. de Snoo, H. Winkler: On exceptional extensions close to the generalized Friedrichs extension of symmetric operators. *Oper. Theory Adv. Appl.* 175 (2007), 111 - 120.
- (22) S. Hassi, H.S.V. de Snoo, A.E. Sterk, H. Winkler: Finite-dimensional graph perturbations of selfadjoint Sturm-Liouville operators. *Operator Theory, Structured Matrices, and Dilations*, Tiberiu Constantinescu Memorial Volume, Theta Series in Advanced Mathematics, (2007), 205–228.
- (23) A. Sandovici, H.S.V. de Snoo, H. Winkler: Ascent, descent, nullity, defect, and related notions for linear relations in linear spaces. *Linear Algebra Appl.* 423 (2007) 456 - 497.
- (24) M. Kaltenbäck, H. Winkler, H. Woracek: Strings, dual strings, and related canonical systems. *Math. Nachr.* 280 Nr. 13-14 (2007), 1518 - 1536.
- (25) S. Hassi, A. Sandovici, H.S.V. de Snoo, H. Winkler: A general factorization approach to the extension theory of nonnegative operators and relations. *J. Oper. Theory* 58 (2) (2007) 351 - 386.
- (26) S. Hassi, A. Sandovici, H.S.V. de Snoo, H. Winkler: Extremal extensions for the sum of nonnegative selfadjoint relations. *Proc. Amer. Math. Soc.* 135 (2007), 3193 - 3204.
- (27) H. Winkler, H. Woracek: On semibounded canonical systems. *Linear Algebra Appl.* 429 (2008) 1082 - 1092.
- (28) S. Hassi, A. Sandovici, H.S.V. de Snoo, H. Winkler: One-dimensional perturbations, asymptotic expansions, and spectral gaps. *Oper. Theory Adv. Appl.* 188 (2008), 149 - 173.
- (29) A. Fleige, S. Hassi, H.S.V. de Snoo, H. Winkler: Sesquilinear forms corresponding to a non-semibounded Sturm-Liouville operator. *Proc. Roy. Soc. Edinburgh Sect. A* 140 (2010), 291 - 318.
- (30) J.-Ph. Labrousse, A. Sandovici, H.S.V. de Snoo, H. Winkler: The Kato decomposition for quasi - Fredholm relations. *Operators and Matrices* 4 (1), (2010), 1 - 51.
- (31) H.S.V. de Snoo, H. Winkler, M. Wojtylak: Zeros of nonpositive type of generalized Nevanlinna functions with one negative square. *J. Math. Anal. Appl.* 382 (1) (2011), 399 - 417.

- (32) H. Winkler, H. Woracek: Reparametrizations of non trace-normed Hamiltonians. *Oper. Theory Adv. Appl.* 221 (2012), 667 - 690.
- (33) J.-Ph. Labrousse, A. Sandovici, H.S.V. de Snoo, H. Winkler: Closed linear relations and their regular points. *Operators and Matrices* 6 (4) (2012), 681 - 714.
- (34) J. Behrndt, S. Hassi, H.S.V. de Snoo, R. Wietsma, H. Winkler: Linear fractional transformations of Nevanlinna functions associated with a non-negative operator. *Complex Anal. Oper. Theory* 7 (2013), 331 - 362.
- (35) H. Winkler, H. Woracek: Symmetry in de Branges almost Pontryagin spaces. *Integral Equations Oper. Theory* 76 (2013), 179 - 212.
- (36) H.S.V. de Snoo, H. Winkler, M. Wojtylak: Global and local behavior of zeros of nonpositive type. *J. Math. Anal. Appl.* 414 (2014), 273 - 284.
- (37) A. Fleige, S. Hassi, H.S.V. de Snoo, H. Winkler: Non-semibounded closed symmetric forms associated with a generalized Friedrichs extension. *Proc. Roy. Soc. Edinburgh Sect. A* 144 (2014), 1 - 15.
- (38) H. Winkler, H. Woracek: A growth condition for Hamiltonian systems related with Krein strings. *Acta Sci. Math. (Szeged)* 80 (2014), 31 - 94.
- (39) H. Winkler: Two-dimensional Hamiltonian systems. in: *Operator Theory*, D. Alpay (Ed.), Springer (2015) 525 - 547.
- (40) T. Berger, C. Trunk, H. Winkler: Linear relations and the Kronecker canonical form. *Linear Algebra Appl.* 488 (2016) 13 - 44.
- (41) A. Fleige, H. Winkler: An indefinite inverse spectral problem of Stieltjes type. *Integral Equations Oper. Theory* 87 (2017), 491 - 514.
- (42) S. Hassi, A. Sandovici, H.S.V. de Snoo, H. Winkler: Extremal maximal sectorial extensions of sectorial relations. *Indagationes Mathematicae* 285 (5) (2017) 1019 - 1055.
- (43) S. Hassi, H.S.V. de Snoo, H. Winkler: Limit properties of eigenvalues in spectral gaps. *Oper. Theory Adv. Appl.* 263 (2018), 335 - 355.
- (44) T. Berger, H. Gernandt, C. Trunk, H. Winkler, M. Wojtylak: The gap distance to the set of singular matrix pencils. *Linear Algebra Appl.* 564 (2019) 28 - 57.
- (45) J.-Ph. Labrousse, A. Sandovici, H.S.V. de Snoo, H. Winkler: Idempotent relations, semi-projections, and generalized inverses. In *Contributions to mathematics and statistics, Essays in honor of Seppo Hassi* (Hrsg. H.S.V de Snoo and H.L. Wietsma), *Acta Wasaensia* 462 (2021) 87-110.
- (46) V. Derkach, D. Strelnikov, H. Winkler: On a class of integral systems. *Complex Anal. Oper. Theory*, 15 (6) (2021) 1-39.
- (47) T. Berger, H.S.V. de Snoo, C. Trunk, and H. Winkler: Linear relations and their singular chains. *Methods Funct. Anal. Topology* 27 (2021), 287-301.

- (48) L. Leben, F. Martinez-Peria, F. Philipp, C. Trunk, H. Winkler: Finite rank perturbations of linear relations and matrix pencils. *Complex Anal. Oper. Theory*, 15 (2) (2021) 1-37.

Further Publications, Proceedings

- (49) H. Winkler: Generalized semi-martingale representations for processes with n -th stationary increments. Diploma thesis, 35 pp., TU Dresden, Germany, 1990.
- (50) H. Winkler: On the inverse spectral problem for two-dimensional canonical systems. Doctoral dissertation, 61 pp., TU Vienna, Austria, 1993.
- (51) H. Winkler: Spectral problems for canonical systems and generalized strings. Habilitation thesis, 163 pp., TU Dresden, Germany, 1999.
- (52) H. Winkler: Spectral representations of canonical systems on a ramified domain. *Dresdener Schriften zur Mathematischen Stochastik*, 3/2000 (preprint ISSN 0946-4735).
- (53) H. Winkler: On exceptional extensions of symmetric relations with defect numbers $(1, 1)$. *Dresdener Schriften zur Mathematischen Stochastik* 4/2000 (preprint ISSN 0946-4735).
- (54) H. Winkler: Inverse problems for small perturbations of canonical systems. *Proceedings of MTNS 2004*, Leuven, Belgium, 3 pp., PaperID MSC-91.
- (55) S. Hassi, A. Sandovici, H.S.V. de Snoo, H. Winkler: Extremal extensions of nonnegative linear relations. *Proc. of the Algorithmic Information Theory Conference, Vaasa 2005*, Finland, *Vaasan Yliopiston Julkaisuja* 124, (2005) 57 - 66.
- (56) A. Sandovici, H.S.V. de Snoo, H. Winkler: Ascent, descent, nullity and defect for linear relations. *Proceedings of the Algorithmic Information Theory Conference, Vaasa 2005*, Finland, *Vaasan Yliopiston Julkaisuja* 124, (2005) 177 - 184.
- (57) J.-Ph. Labrousse, A. Sandovici, H.S.V. de Snoo, H. Winkler: Quasi - Fredholm relations in Hilbert spaces. *Universitatea din Bacau Studii si Cercetari Stiintifice, Ser. Mat.* 16, (2006) 93 -106.
- (58) Jussi Behrndt, Seppo Hassi, Henk de Snoo, Rudi Wietsma, Henrik Winkler: Linear fractional transformations of Stieltjes functions. *Proc. Appl. Math. Mech.* 11, (1) (2011) 887-888.
- (59) E. Hennig, D. Krause, E. Schäfer, R. Sommer, C. Trunk, H. Winkler: Frequency compensation for a class of DAEs arising in electrical circuits. *Proc. Appl. Math. Mech.* 11, (1) (2011) 837-838.
- (60) T. Berger, H. Gernandt, C. Trunk, H. Winkler, M. Wojtylak: A new bound for the distance to singularity of a regular matrix pencil. *Proc. Appl. Math. Mech.* 17, (2018) 863-864.

- (61) T. Berger, H. de Snoo, C. Trunk, H. Winkler: A Jordan-like decomposition for linear relations in finite-dimensional spaces. arXiv preprint 2209.14234 (2022).