

LIST OF PUBLICATIONS

Scientific

1. (I.B) Counterexamples to "Probleme des topologies" of Grothendieck. Ann. Acad. Sci. Fenn. Ser. A I. Diss. 63 (1986).
2. (I.A) The Projective Tensor Product of Fréchet–Montel Spaces. *Studia Mathematica* 91, 17–30 (1988).
3. (I.A) (FBa)– and (FBB)–spaces. *Mathematische Zeitschrift* 198, 339–365 (1988).
4. (III.B) A counterexample to "Probleme des topologies" of Grothendieck. *Seminaire d'analyse fonctionelle 1985/1986/1987* (Beauzamy–Guerre–Maurey–Pisier), *Publications Mathematiques de l'Universite Paris VII*, 165–169 (1988).
5. (III.B) Examples concerning the projective tensor product of Frechet spaces. *Seminaire d'initiation a l'analyse 1986/1987* (Choquet–Rogalski–Saint Raymond). *Publications Mathematiques de l'Universite Pierre et Marie Curie, Paris* (1988).
6. (I.B) Examples of non–distinguished Frechet spaces. *Ann. Acad. Sci. Fenn. Ser. A I* 14, 75–88 (1989).
7. (I.A) On a problem of topologies in infinite dimensional holomorphy (J.M. Ansemil – J.Taskinen). *Arch. Math.* 54, 61–64 (1990) .
8. (I.A) On the injective tensor product of (DF)–spaces (A.Defant–K.Floret–J.Taskinen). *Arch. Math.* 57, 149–154 (1991).
9. (I.A) Quojections and the problem of topologies of Grothendieck (J.Bonet–J.Taskinen). *Note Mat.* 11 (1991) 49–59.
10. (I.A) Non–distinguished Fréchet function spaces (J.Bonet–J.Taskinen). *Bull. Soc. Roy. Sci. Lige* 58, 483–490 (1989).
11. (I.A) A Fréchet–Schwartz space with basis having a complemented subspace without basis. *Proc. Amer. Math. Soc.* 113,1 (1991), 151–155.
12. (I.A) Tensor stable Fréchet and (DF)–spaces (J.Bonet–J.C.Diaz–J.Taskinen). *Collect.Math.* 42,3(1991), 199–236.
13. (III.B) On the (FT) and (DFT)–spaces. (J.Bonet–J.C.Diaz–J.Taskinen). *Colloquium 1988–1990, Matematicas Universidad de Extremadura* (Eds. Cobos–Castillo–Sánchez), 88–94 (1991).
14. (I.A) Factorization of multilinear differential operators with constant coefficients. *J.Math. Anal. Appl.* 162.2., 506–525 (1991)
15. (III.A) Factorization of multilinear operators. *Progress in Functional analysis, North–Holland Mathematics Studies* 170, 319–331.
16. (I.A) A continuous surjection from the unit interval onto the unit square. *Rev. Mat. Univ. Complutense Madrid* 6.1 (1993), 101–120.
17. (I.A) Remarks on bases in a Fréchet function space (Päivi Mattila, J.Taskinen.) *Rev.Mat. Univ.Complutense Madrid* 6.1 (1993), 83–99.

18. (I.A) An application of averaging operators to multilinearity. *Math. Annalen* 297.3 (1993), 567–572.
19. (I.A) Dense factorization of compact operators. *Results in Math.* 26 (1994), 143–154.
20. (I.A) Dense factorizations and local Banach spaces. *Math. Nachr.* 171 (1995), 303–314.
21. (I.A) Linearization of holomorphic mappings on $C(K)$ -spaces. *Isr.J.Math.* 92 (1995), 207–219.
22. (I.A) The subspace problem for weighted inductive limits of spaces of holomorphic functions. (J.Bonet–J.Taskinen). *Michigan Math.J.* 42 (1995), 259–268.
23. (I.A) Factorization of holomorphic mappings on $C(K)$ -spaces. *Proc.Amer. Math.Soc.* 125,8 (1997). 2337–2346.
24. (I.A) An infinite polynomially nonlinear system of equations. *J.Math.Anal. Appl.* 200 (1996), 591–613.
25. (I.A) Weighted spaces of harmonic and holomorphic functions: Sequence space representations and projective descriptions. (P.Mattila–E.Saksman–J.Taskinen). *Proc.Edinb.Math.Soc.* 40 (1997), 41–62.
26. (I.A) Diffusion equation with a general polynomial perturbation. *Diff.Int. Equations.* 10.3 (1997), 437–454.
27. (I.A) Compact composition operators on general weighted spaces. *Houston J.Math.* 27 (2001), 203–218.
28. (I.A) Associated weights and spaces of holomorphic functions (K.D.Bierstedt–J.Bonet–J.Taskinen). *Studia Math.* 127, 2 (1998), 137–168.
29. (I.A) Stability of Cahn–Hilliard fronts (J.Bricmont–A.Kupiainen–J.Taskinen). *Comm.Pure.Appl.Math.* LII (1999), 839–871.
30. (I.A) Composition operators between weighted Banach spaces of analytic functions (J.Bonet–P.Domanski–M.Lindström–J.Taskinen). *J.Austr. Math. Soc. (Ser. A)* 64 (1998), 101–118.
31. (I.A) Inductive limits and geometry of Banach spaces. *Math. Proc. Cambridge Phil.Soc.* 126 (1999), 99–107.
32. (I.A) (J.Bonet–J.Taskinen) Subspace problem for weighted inductive limits revisited. *Rocky Mountain Math.J.* 30, 1 (2000), 85–99.
33. (I.B) Regulated domains and Bergman type projections. *Ann.Acad.Sci.Fenn.* 28 (2003), 55–68.
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35. (VII) H^p spaces. Lecture notes, in Report series of University Joensuu, Department of Mathematics, vol.
36. (I.A) The essential norm of Bloch–to– Q_p composition operators (M.Lindström–S.Makhmutov–J.Taskinen). *Can.Math.Bull.* 47,2 (2004), 49–59.
37. (III.A) Bergman projection on simply connected domains. In “Recent progress in functional analysis”, eds. Bierstedt–Bonet–Maestre–Schmets, North–Holland mathematics studies 170, pp.255–261.
38. (I.A) Note on the paper “Regulated domains and Bergman type projections”. *J. Function Spaces Appl.*2 (2004), 97–106.
39. (I.A) Atomic decomposition of a weighted inductive limit. *RACSAM* 97,2 (2003), 325–337.

40. (I.A) Regularly decreasing weights and the topological subspace problem. *Math. Nachr.* 278, 10 (2005), 1–8.
41. (I.A) Minimal L^∞ -type spaces on strictly pseudoconvex domains on which the Bergman projection is continuous (M.Engliš–T.Hänninen–J.Taskinen). *Houston J. Math.* 32,1 (2006).
42. (I.A) Anomalous scaling for 3d Cahn–Hilliard fronts (T.Korvola–A.Kupiainen–J.Taskinen). *Comm. Pure Appl. Math.* LVIII, (2005), 1077–1115.
43. (I.A) Weighted L^∞ -estimates for Bergman projections (J.Bonet–M.Engliš–J.Taskinen). *Studia Math.* 171,1 (2005), 67–92.
44. (I.A) Bloch-to-BMOA compositions in several complex variables (O.Blasco–M.Lindström–J.Taskinen). *Complex Var. Theory Appl.* 50, 14 (2005), 1061–1080.
45. (I.A) Asymptotical behaviour of a class of semilinear diffusion equations. *J.Evol. Equations.* 7,3 (2007), 429–447.
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47. (I.A) Atomic decomposition of a weighted inductive limit in \mathbf{C}^n (T.Hänninen–J.Taskinen). *Mediterranean J.Math.* 2,3 (2005), 277-290
48. (I.A) Deformation quantization and Borel’s theorem in locally convex spaces (M.Engliš–J.Taskinen). *Studia Math.* 180,1 (2007), 77–93.
49. (I.A) Asymptotics of the solution to the Neumann problem in a thin domain with sharp edge (S.A.Nazarov–J.Taskinen). *J.Math.Sci.* 142,6 (2007), 2630–2644.
50. (I.A) Convergence to a singular steady state of a parabolic equation with gradient blow-up (M.Fila–J.Taskinen–M.Winkler). *Appl.Math. Letters.* 20 (2007), 578–582
51. (I.A) Sup-norm estimates for Bergman projections on regulated domains (P.Erkkilä–J.Taskinen). *Math.Scand.* 102, 1 (2008), 111-130.
52. (I.A) On the spectrum of the Steklov problem in a domain with a peak (S.A.Nazarov–J.Taskinen). *Vestnik St. Petersburg Univ.* 41 (2008), no. 4, 56–65.
53. (I.A) Weighted inductive limits of entire functions (K.D.Bierstedt–J.Bonet–J.Taskinen). *Monatshefte Math.* 154, 2 (2008), 103–120.
54. (I.A) On asymptotics of Neumann harmonics when a cavity is close to the exterior boundary of the domain (G.Cardone–S.A.Nazarov–J.Sokolowski–J.Taskinen). *C.R.A.S.Mecanique* 335 (2007), 763–767.
55. (I.A) Toeplitz-operators on the space of analytic functions with logarithmic growth (J.Bonet–J.Taskinen). *J.Math.Anal.Appl.* 353 (2009), 428–435.
56. (I.A) Spectral theory of Toeplitz and Hankel operators on the Bergman space A^1 (J.Taskinen–J.Virtanen). *New York J. Math.* 14 (2008), 1-19.
57. (I.A) Long time asymptotics of sub-threshold solutions of a semilinear Cauchy problem. *Diff.Eq.Appl.* 3,2 (2011), 279-297
58. (I.B) Neumann Laplacian on a domain with tangential components in the boundary (S.A.Nazarov–J.Sokolowski–J.Taskinen). *Ann.Acad.Sci.Fenn.* 34,1 (2009), 131–143.
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60. (VII) Asymptotics of solutions to a mixed boundary problem in a thin lens domain (S.A.Nazarov–J.Taskinen). Manuscript.

61. (VII) Criteria for the discreteness of the spectrum of the Neumann problem for elliptic systems in horn-shaped domains (G.Cardone–S.A.Nazarov–J.Taskinen). Submitted.
62. (I.A) Toeplitz operators on Bergman spaces with locally integrable symbols (J.Taskinen–J.Virtanen). *Rev.Math.Iberoamericana*. 26,2 (2010), 693-706.
63. (I.A) On weighted spaces of holomorphic functions of several variables (W.Lusky–J.Taskinen). *Israel J.Math.*. 176,1 (2010), 381-399.
64. (I.A) On essential and continuous spectra of the linearized water-wave problem in a finite pond (S.A.Nazarov–J.Taskinen). *Math.Scand*. 106,1 (2010), 141–160.
65. (I.A) Criteria for the existence of the essential spectrum for beak-shaped elastic bodies. (G.Cardone–S.A.Nazarov–J.Taskinen). *J.Math. Pur. Appl.* 92,9 (2009), 628–650.
66. (I.A) Gaps in the essential spectrum of infinite periodic necklace shaped waveguide (S.A.Nazarov–K.Ruotsalainen–J.Taskinen). *C.R.A.S. Mecanique* 337 (2009), 119-123.
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68. (I.A) Essential spectrum of a periodic elastic waveguide may contain arbitrarily many gaps(S.A.Nazarov–K.Ruotsalainen–J.Taskinen). *Applicable Anal.* 89,1 (2010), 109–124.
69. (I.A) Toeplitz operators with distributional symbols on Bergman spaces (A.Perälä–J.Taskinen–J.Virtanen). *Proc.Edinburgh Math.Soc.* 54, 2 (2011), 505-514
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71. (I.A) On the spectrum of the Robin problem in a domain with a peak (S.Nazarov–J.Taskinen). *Funct.Anal.Appl.* 45,1 (2011), 93-96
72. (I.A) Radiation conditions at the top of a rotational cusp in the theory of water-waves (S.Nazarov–J.Taskinen). *Math.Model Numer.Anal.* 45, 4 (2011), 50–63.
73. (I.A) New results and open problems on Toeplitz operators in Bergman spaces (A.Perälä–J.Taskinen–J.Virtanen). *New York J. Math.* 17a (2011), 147-164.
74. (I.A) Toeplitz operators with distributional symbols on Fock spaces (A.Perälä–J.Taskinen–J.Virtanen). *Funct. et approx.* 44,2 (2011), 203-213.
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76. (I.A) Linear water-wave problem in a pond with a shallow beach (J.Martin–J.Taskinen). *Applicable Anal.* 92, 10 (2013), 2229-2240.
77. (I.A) Two-sided estimates for eigenfrequencies in the John problem on freely floating body (S.A.Nazarov–J.Taskinen) *J. Math.Sci* 185,1 (2012), 50-63. Translated from: *Zapiski Nauchnykh Seminarov POMI* 397 (2011), 89-114.
78. (I.A) Asymptotic behaviour of trapped modes in two-layer fluids (S.A.Nazarov–J.Taskinen–J.Videman). *Wave Motion* 50,2 (2013), 111–126..
79. (I.A) Gaps in the spectrum of the Neumann problem on a perforated plane (S.A.Nazarov–K.Ruotsalainen–J.Taskinen). *Dokl.Math.* 86,1 (2012), 1-5.
80. (I.A) Spectral gaps in the Dirichlet and Neumann problems on the plane perforated by a double-periodic family of circular holes (S.A.Nazarov–K.Ruotsalainen–J.Taskinen). *J.Math.Sci.* 181,2 (2012), 164-222.

81. (I.A) Localization estimates for eigenfrequencies of waves trapped by a freely floating body in a channel (S.A.Nazarov–J.Taskinen) *SIAM J.Math.Anal.* 45, 5 (2013), 2523–2545.
82. (I.A) Spectral anomalies of the Robin Laplacian in non-Lipschitz domains. (S.A.Nazarov–J.Taskinen). *J.Math.Sci.Univ. Tokyo* 20 (2013), 1–64.
83. (I.A) Korn inequality for a thin rod with rounded ends. (S.A.Nazarov–A.S.Slutskiĭ–J.Taskinen). *Math.Meth.Appl.Sci.* 37, 16 (2014), 2463-2483.
84. (I.A) Spectral gaps for the linear surface wave model in periodic channels. (F.L. Bakharev–K. Ruotsalainen–J. Taskinen). *Quarterly J.Mechanics Appl.Math.* 67,3 (2014), 343–362.
85. (I.A) Structure of the spectrum of the periodic family of identical cells connected through converging apertures. (S.A.Nazarov–J. Taskinen) *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* 409 (2012), 130–150 (Russian), English translation: *J.Math.Sci.* 194,1 (2013), 72–82.
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87. (I.A) Spectra of open waveguides in periodic media. (G.Cardone–S.A.Nazarov–J. Taskinen). *Journal of Functional Analysis.* 269, 8 (2015), 2328–2364
88. (I.A) Localization effect for Dirichlet eigenfunctions in thin non-smooth domains and spectral gaps for double-periodic layers. (S.A. Nazarov–E. Pérez–J. Taskinen). *Trans. Amer. Math. Soc.* 368 (2016), 4787–4829.
89. (I.A) Properties of the spectrum in the John problem on a freely floating submerged body in a finite basin. (S.A. Nazarov–J. Taskinen). *Diff.Equations* 49, 12 (2013), 1544–1559.
90. (I.A) Spectrum of the linear water model for a two layer liquid with cuspidal geometries at the interface. (J.Martin–S.A.Nazarov–J.Taskinen). *Z. Angew. Math. Mech.*, 1–18 (2014)
91. (I.A) Toeplitz operators on Dirichlet-Besov spaces. (A.Perälä–J.Taskinen–J.Virtanen). To appear in *Houston J. Math.*
92. (I.A) A note about Volterra operators on weighted Banach spaces of entire functions. (J.Bonet–J.Taskinen). *Math.Nachr.* 288, 11-12 (2015), 1216-1225.
93. (I.A) Singular perturbation Dirichlet problem in a double-periodic perforated plane (F.Ferraresso–J.Taskinen). *Ann.Univ.Ferrara* 61,2 (2015), 277–290.
94. (I.A) Spectral gaps for periodic piezoelectric waveguides (S.Nazarov–J.Taskinen). *Z.Angew.Math.Phys.* 66,6 (2015), 3017–3047.
95. (I.A) Solid hulls of weighted Banach spaces of entire functions. (J.Bonet–J.Taskinen). To appear in *Rev.Mat.Iberoamericana*.
96. (I.A) Elastic and piezoelectric waveguides may have infinite number of gaps in their spectra (S.A.Nazarov–J.Taskinen). *Comptes Rendus Mécanique.* 344, 3 (2016), 190–194.
97. (I.A) Effects of Rayleigh waves to essential spectra in composite periodic plane. (F.Bakharev–G.Cardone–S.A.Nazarov–J.Taskinen). *Integral Eq.Oper.Theory* 88 (2017), 373–386.
98. (VII) Umov-Poynting-Mandelstam radiation conditions in periodic composite piezoelectric waveguides (G.Leugering–S.A.Nazarov–J.Taskinen). Submitted.

99. (I.A) Embedded eigenvalues for water-waves in a three dimensional channel with a thin screen (V.Chiado Piat–S.A.Nazarov–J.Taskinen). To appear in Quarterly J.Mech.Appl.Math.
100. (I.A) Cartan theorems for Stein manifolds over a discrete valuation base. (J.Taskinen-K.Vilonen). To appear in J.Geom.Analysis.
101. (I.A) Radiation conditions for the linear water-wave problem in periodic channels (S.A.Nazarov–J.Taskinen). To appear in Math.Nachr.
102. (VII) Pathology of essential spectra of elliptic problems in periodic family of beads threaded by a spoke thinning at infinity (S.A.Nazarov–J.Taskinen). Submitted.
103. (I.A) Bands in the spectrum of a periodic elastic waveguide (F.L. Bakharev–J.Taskinen). Zeitschrift Angew.Math.Phys. 68 (2017)
104. (I.A) On generalized Toeplitz and little Hankel operators on Bergman spaces. (J.Taskinen–J.Virtanen). To appear in Archiv.Math.
105. (I.A) Solid hulls of weighted Banach spaces of analytic functions on the unit disc with exponential weights. (J.Bonet–J.Taskinen). To appear in Ann.Acad.Sci.Fenn.
106. (I.A) Singularities at the contact point of two kissing Neumann balls (S.A.Nazarov–J.Taskinen). To appear in J.Diff.Equations.
107. (VII) Monomial basis in Korenblum type spaces of analytic functions (J.Bonet–W.Lusky–J.Taskinen). Submitted.
108. (VII) Distance formulas on weighted Banach spaces of analytic functions (J.Bonet–W.Lusky–J.Taskinen). Submitted.
109. (VII) Solid hulls and cores of weighted H^∞ -spaces (J.Bonet–W.Lusky–J.Taskinen). Submitted.
110. (VII) Umov-Poynting-Mandelstam radiation conditions in periodic composite piezoelectric waveguides (G.Leugering–S.A.Nazarov–J.Taskinen). Submitted.
111. (VII) Essential spectrum of a periodic waveguide with non-periodic perturbation (S.A.Nazarov–J.Taskinen). Submitted.
112. (VII) On compactness of Toeplitz operators in Bergman spaces. (J.Taskinen–J.Virtanen) Submitted.
113. (VII) Schauder basis and decay rate of the heat equation (J.Bonet–W.Lusky–J.Taskinen). Submitted.

Others

1. Matematiikan päivät 2002 Joensuussa. Sanansaattaja 1 (2002), p.10.
2. Matematiikan päivät alkavat Joensuussa. Abstract of 1. published in Savon Sanomat 7.1.2002.
3. Function spaces and differential equations. Arkhimedes 2 (2005), p. 7–8.
4. Spektraaliteoriaa periodisissa alueissa. Arkhimedes (2017).

Classification:

- I.A refereed article, published abroad
- I.B refereed article, published in Finland
- III.A refereed “proceedings”, published abroad
- III.B “proceedings” not scientifically refereed, published abroad
- VII other