LISTE DE PUBLICATIONS DE VESSELIN PETKOV

Monographies:

I. V.M.Petkov, *Scattering Theory for Hyperbolic Operators*, North-Holland, Amsterdam, 1989.

II. V.Petkov and L.Stoyanov, *Geometry of Reflecting Rays and Inverse Spectral Problems*, John & Wiley and Sons, Chichester, 1992.

III. V. Petkov and L. Stoyanov, *Geometry of the Generalized Geodesic Flow and Inverse Spectral Problems*, John & Wiley and Sons, Chichester, 2017.

Articles:

[1] V.M.Petkov, *The Cauchy problem for symmetrizable systems and for nonstrictly hyperbolic equations*, Uspehi Mat. Nauk. **26** no.6 (1971), 251-252 (in Russian).

[2] V.M.Petkov, *Necessary conditions for the Cauchy problem for hyperbolic systems with multiple characteristics to be well-posed*, Uspehi Mat. Nauk. **27**, no.4 (1972), 221-222 (in Russian).

[3] V.M.Petkov, *Necessary conditions for the correcteness of the Cauchy problem for nonstrictly hyperbolic equations*, Dokl. Acad. Nauk SSSR. **206** (1972), 287-290 (in Russian); English translation in Soviet Math. Dokl. **13** (1972), 1213-1217.

[4] V.M.Petkov *On the Cauchy problem for first-order hyperbolic systems with multiple characteristics*, Dokl. Acad. Nauk SSSR. **209** (1973), 795-797 (in Russian); English translation in Soviet Math. Dokl. **14** (1973), 534-537.

[5] V.M.Petkov *The Cauchy problem for nonsymmetrizable hyperbolic systems*, pp. 167-173 in Proc. Second Spring Conference of Bulg. Math. Soc. Vidin, Izdat. Bulg. Acad. Sci., Sofia, 1974 (in Bulgarian).

[6] V.Ia.Ivrii and V.M.Petkov *Necessary conditions for the Cauchy problem for nonstrictly hyperbolic equations to be well posed*, Uspehi Mat. Nauk. **29** no.5 (1974), 3-70 (in Russian); English translation in Russian Math. Surveys. **29** (1974), 1-70.

[7] V.M.Petkov, *Necessary conditions for the Cauchy problem for nonsymmetrizable systems to be well posed*, Trans. Seminar Petrovski. **1** (1975), 211-236 (in Russian); English translation in Amer. Math. Soc. Transl. **119** (1982), 25-50.

[8] V.M.Petkov, *Cauchy problem for a class of nonstrictly hyperbolic equations with double characteristics*, Serdika, **1** (1975), 372-380 (in Russian).

[9] V.M.Petkov and R.D.Lazarov, *Econimic difference sheme for Neumann boundary problem for a hyperbolic equation of second order*, pp. 209-215 in Third Spring Conference of Bulg. Math. Soc. Bourgas, Izdat. Bulg. Acad. Sci. Sofia, 1976 (in Bulgarian).

[10] V.M.Petkov and N.D.Kutev, *On effectively hyperbolic systems of first order* Ann. Sofia University, Mathematics and Mechanics **67** (1976), 375-389 (in Russian).

[11] V.M.Petkov, *Parametrix of the Cauchy problem for nonsymmetrizable hyperbolic systems with characteristics of constant muultiplicity* Trans. Moscow Math. Soc. **1** (1978), 3-47 (in Russian); English translation in Trans. Moscow Math. Soc. **1** (1980), 1-47.

[12] V.M.Petkov, *Le problème de Cauchy et la propagation de singularités pour une classe des systèmes hyperboliques non symétrisables*, Séminaire Goulaouic-Lions-Schwartz, Exposé No. V, Ecole Polytechnique, 1974-1975.

[13] V.M.Petkov, *Equations et systèmes hyperboliaues à caractéristiques multiples*, Université Paris VI, URA 189 CNRS, 1985.

[14] V.M.Petkov et G.Popov, *Propagation des singularités pour des systèmes hyperboliques non symétrisables*, Serdika, **2** (1976), 283-294.
[15] V.M.Petkov, *Paramétrix du problème de Cauchy pour des systèmes hyperboliques à caractéristiques de multiplicité constante*, C. R. Acad. Bulg. Sci. **29** (1976), 1095-1097.
[16] V.M.Petkov, *Propagation de singularotés pour des systèmes hyperboliques à caractéristiques de multiplicité variable*, C. R. Acad. Bulg. Sci. **30** (1977), 183-185.
[17] V.M.Petkov, *Propagation de singularités pour une classe des systèmes hyperboliques non symétrisables*, C. R. Acad. Bulg. Sci. **30** (1977), 487-489.
[18] V.M.Petkov, *Propagation de singularités pour des systèmes hyperboliques à caractérestiques de multiplicité constante*, Serdika. **3** (1977), 153-158.
[19] V.M.Petkov, *Propagation de singularités pour une classe des systèmes hyperboliques à caractérestiques de multiplicité variable*, Serdika, **3** (1977), 187-197.
[20] V.M.Petkov, *Sur la condition de Levi pour des systèmes hyperboliques àcaractéristiques de multiplicité variable*, Serdika, **3** (1977), 309-317.
[21] V.M.Petkov, *Propagation of singularities for pseudo-differential operators*, Zentral Institut für Mathematik und Mechanik, Berlin, 1977.
[22] V.M.Petkov, *Application of Fourier integral operators concerning hyperbolic operators with multiple characteristics*, pp. 33-46 in Contribution to the School on Global Analysis, ed. by B.-W.Schulze, Berlin, 1977.
[23] V.M.Petkov, *Microlocal forms for hyperbolic systems*, Math. Nachr. **93** (1979), 117-131.
[24] V.M.Petkov, *Asymptotics of the scattering amplitude for non-convex bodies*, C. R. Acad. Bulg. Sci. **32** (1979), 573-576.
[25] V.M.Petkov, *Propagation de singularités pour le problème de transmission et application au problème inverse de diffusion*, C. R. Acad. Sc. Paris, Série A, **290** (1980), 753-755.
[26] V.M.Petkov, *High frequency asymptotics of the scattering amplitude for non-convex bodies*, Comm. in Partial Differential Equations, **5** (1980), 293-329.
[27] V.Petkov, *Représentation de l'opérateur de diffusion pour des systèmes hyperboliques dissipatifs*, C. R. Acad. Sc. Paris, Série A, **291** (1980), 95-98.
[28] V.Petkov, *Comportement asymptotique de la phase de diffusion pour des domaines non-convexes*, Séminaire Goulaouic-Schwartz, Exposé No. XIII, Ecole Polytechnique, 1980-1981.
[29] V.Petkov et G.Popov, *Asymptotique de la phase de diffusion pour des domaines non-convexes*, C. R. Acad. Sc. Paris, Série A, **292** (1981), 275-277.
[30] V.Petkov, *Construction de paramétrix pour le problème de Cauchy pour des systèmes hyperboliques (cas symplectique)*, Seminaire Equations aux Dérivées Partielles Hyperboliques et Holomorphes, Université Paris VI, Paris, 1980-1981.
[31] V.Petkov, *Representation of the scattering operator for dissipative hyperbolic systems*, Comm. in Partial Differential Equations, **6** (1981), 993-1022.
[32] V.Petkov, *Formule de Weyl pour le laplacien dans des domaines non-bornés*, pp. 291-300 in Nonlinear partial differential equations and their applications, Seminar Collège de France, **vol.III**, Pitman Research Notes in Mathematics Series **70**, Boston, 1982.
[33] V.Petkov, *Propagation de singularités sur le bord pour des systèmes hyperboliques à caractérestiques de multiplicité constante*, C. R. Acad. Sc. Paris. Série A. **293** (1982), 637-639.
[34] V.Petkov, *Propagation of singularities and inverse scattering problem for transparent obstacles*, J. Math. Pures Appl. **60** (1982), 65-90.
[35] V.Petkov, *Le problème inverse de diffusion pour les systèmes hyperboliques*, Séminaire Equations aux Dérivées Partielles Hyperboliques et Holomorphes, Université Paris VI, Paris, 1981-1982.
[36] V. Petkov, *Inverse scattering problem for transparent obstacles*, Math. Proc. Cambridge Phil. Soc. **92** (1982), 361-367.
[37] V.Petkov and G.Popov, *Asymptotic behaviour of the scattering phase for non-trapping obstacles*, Ann. Inst. Fourier (Grenoble). **32** (1982), 111-149.
[38] V.Petkov, *Construction d'une paramétrix microlocale et propagation des singularités sur le bord pour les systèmes hyperboliques*, Journées EDP, Saint-Jean-de-Monts, Conférence No.11, Soc. Math. de France, 1982.

[39] V.Petkov, *Distribution des pôles de la matrice de diffusion pour des obstacles captifs*, C. R. Acad. Sc. Paris, Série A. **295** (1982), 443-445.
[40] V.Petkov, *La distribution des pôles de la matrice de diffusion*, Séminaire Goulaouic-Meyer-Schwartz, Exposé No.VII, Ecole Polytechnique, 1982-1983.
[41] V.Petkov et D.Robert, *Asymptotique semi-classique d'hamiltoniens quantiques et trajectoires classiques périodiques*, C. R. Acad. Sc. Paris, Série A, **296** (1983), 553-556.
[42] V.Petkov et P.Vogel, *La représentation de l'application de Poincaré correspondant aux rayons périodiques réflechissants*, C. R. Acad. Sc. Paris, Série A, **296** (1983), 633-635.
[43] Pham de Lai et V. Petkov, *Comportement asymptotique de la fonction spectrale et d'opèrateur de Laplace-Beltrami sur une variété ayant des singularités coniques*, C. R. Acad. Sc. Paris, Série A, **297** (1983), 167-170.
[44] V.Petkov, *Solutions des systèmes hyperboliques dissipatifs qui disparaissent quand* $t \to \infty$, pp. 44-50 dans Séminaire Equations aux Dérivées Partielles Hyperboliques et Holomorphes, ed. par J.Vaillant, Hermann, Paris, 1984.
[45] V.Petkov, *Note on the distribution of poles of the scattering matrix*, J. Math. Anal. Appl. **101** (1984), 582-587.
[46] V. Petkov, *Singularities of the scattring kernel*, pp. 288-296 in Nonlinear partial differnetial equations and their applications, Collège de France Seminarvol. vol. **VI**, Pitman Research Notes in Mathematics Series **109**, Boston, 1984.
[47] V.Petkov et D.Robert, *Asymptotique semi-classique de spectre d'hamiltoniens quantiques et trajectoires classiques périodiques*, Commun. in Partial Differential Equations, **10** (1985), 365-390.
[48] V.Petkov, *Propriétés génériques des rayons réflechissants et applications aux problèmes spectraux*, Séminaire Bony-Sjöstrand-Meyer, Exposé No. XII, Ecole Polytechnique, 1984-1985.
[49] V.Petkov et L.Stoyanov, *Propriétés génériques de l'application de Poincaré et des géodesiques périodiques généralisées*, Séminaire EDP, Exposé No. XII, Ecole Polytechnique, 1985-1986.
[50] V.Petkov and L.Stoyanov, *Periodic geodesics of generic non-convex domains in* $\mathbb{R}^2$ *and the Poisson relation*, Bull. Amer. Math. Soc. **15** (1986), 88-90.
[51] A.Bachelot et V.Petkov, *Existence de l'opérateur de diffusion pour l'équation des ondes avec un potentiel périodique en temps*, C. R. Acad. Sc. Paris, Série A, **303** (1986), 671-673.
[52] V.Georgiev et V.Petkov, *Théorème de type RAGE pour des opérateurs à puissances bornées*, C. R. Acad. Sc. Paris, Série A, **303** (1986), 605-608.
[53] V.Petkov, *Poisson relation for manifolds with boundary*, pp.317-327 in Hyperbolic Equations and Related Topics, Taniguchi Symposium Katata 1984, ed. by S.Mizohata, Tokyo Inc. Press, 1986.
[54] V.Petkov, *Inverse spectral problems*, pp.98-100 in Spring Conf.of Bilg.Math. Soc. Izdat Bulg. Acad. Sci. Sofia, 1986 (in Bulgarian).
[55] V.Petkov and L.Stoyanov, *Spectrum of the Poincaré map for periodic reflecting rays in generic domains*, Math. Zeischrift, **194** (1987), 505-518.
[56] V.Petkov and L.Stoyanov, *Periods of multiple reflecting geodesics and inverse spectral results*, Amer. J. Math. **109** (1987), 617-668.
[57] V.Petkov, *Scattering theory for mixed problems in the exteriour of moving obstacles*, pp.141-155 in Hyperbolic Equations, ed by F.Colombini and M.K.V.Murthy, Pitman Research Notes in Mathematics Series **158**, Longman Scientific & Technical, 1987.
[58] V.Petkov, *Scattering Theory for Hyperbolic Operators*, Notas de Curso No.24, Universidade Federal de Pernambuco, Recife, 1987.
[59] V.Petkov and L.Stoyanov, *Singularities of the scattering kernel for non-convex obstacles*, Journées EDP, Saint-Jean-de-Monts, Conférence No.11, Soc. Math. de France, 1987.
[60] A.Bachelot et V.Petkov, *Existence des opérateurs des ondes pour les systèmes hyperboliques avec un potentiel périodique en temps*, Ann.Inst. H. Poincaré (Physique théorique), **47** (1987), 383-428.
[61] V.Petkov and Tsv.Rangelov, *Leading singularity of the scattering kernel for moving obstacles*, C. R. Acad. Bulg. Sci. **40** (1987), 5-9.
[62] V.Petkov and L.Stoyanov, *On the number of periodic reflecting rays in generic domains*, Erg. Theory and Dynam. Systems, **8** (1988), 81-91.

[63] V.Petkov, *Propagation des singularités et l'apparation des ondes laterales pour des systèmes symétriques*, pp.9-30 dans Calcul des Opérateurs et Front d'Onde, ed. par J.Vaillant, Hermann, Paris, 1988.

[64] V.Petkov, *Les problèmes inverses de diffusion pour les perturbations dépendant du temps*, Séminaire EDP, Exposé No. XX, Ecole Polytechnique, 1987-1988.

[65] A.Bachelot et V.Petkov, *Existence de l'opérateur de diffusion pour l'équation des ondes avec un potentiel périodique en temps*, pp.13-27 in Nonlinear partial differential equations and their applications, Collége de France Seminar, vol.**IX**, Pitman Research Notes in Mathematics Series **181**, Longman Scientific & Technical, 1988.

[66] V.Petkov and L.Stoyanov, *Singularities of the scatterig kernel for several strictly convex obstacles*, Trans. Amer. Math. Soc. **320** (1989), 203-235.

[67] V.Petkov and V.Georgiev, *RAGE theorem for power bounded operators and decay of local energy for moving obstacles*, Ann. Inst. H. Poincaré (Physique théorique), **51** (1989), 155-185.

[68] V.Petkov and L.Stoyanov, *Singularities of the scattering kernel for a class of star-shaped non-convex obstacles*, Mathematica Applicata e Computacional, **8**, No.2 (1989), 167-176.

[69] V.Petkov, *Les singularités du noyau de l'opérateur de diffusion pour des obstacles non-convexes*, Séminaire EDP, Exposé No. VIII, Ecole Polytechnique, 1989-1990.

[70] F.Cardoso and V.Petkov, *Leading singularity of the scattering kernel for moving obstacles with dissipative boundary conditions*, Bolettino U.M.I. **7** 4-B (1990), 567-589.

[71] V.Petkov and Tsv.Rangelov, *Leading singularity of the scattering kernel for moving obstacles*, Mathematica Balkanika (New Series) **4** No.1 (1990), 91-112.

[72] F.Cardoso, V.Petkov and L.Stoyanov, *Singularities of the scattering kernel for generic obstacles*, Ann. Inst. H. Poincaré (Physique théorique), **53**, (1990), 445-466.

[73] V.Petkov, *Phase de diffusion pour des perturbations captives*, Journées EDP, Saint-Jean-de-Monts, Soc. Math. de France, 1990.

[74] V.Petkov, *Singularities of the scattering kernel for non-convex obstacles*, pp.200-208 in Integral Equations and Inverse Problems, ed. by V.Petkov and R.Lazarov, Pitman Research Notes in Mathematics Series **235**, Longman Scientific & Technical, 1991.

[75] V.Petkov, *Pôles de la matrice de diffusion pour des perturbations captifs*, Séminaire EDP, Exposé No. XV, Ecole Polytechnique, 1990-1991.

[76] V.Petkov, *Le comportement de la résolvante modifiée du Laplacien pour des obstacles captifs*, Séminaire EDP, Exposé No.XVIII, Ecole Polytechnique, 1991-1992.

[77] V.Petkov and G.Vodev, *Upper bounds on the number of scattering poles and the Lax-Phillips conjecture*, Asymptotic Analysis, **7** (1993), 97-104.

[78] V.Petkov and G.Popov, *On the Lebesgue measure of the periodic points of a contact manifold*, Math. Zeischrift, **218** (1995), 91-102.

[79] V.Petkov and L.Stoyanov, *Sojourn times of trapping rays and the behaviour of the modified resolvent of the Laplacian*, Ann. Inst. H. Poincaré (Physique théorique), **62** (1995), 17-45.

[80] V.Petkov and L.Stoyanov, *Sojourn times of reflecting rays and singularities of the scattering kernel*, pp. 516-525 in Third International Conference on Mathematical and Numerical Aspects of Wave Propagation, Ed. by Gary Cohen, SIAM, 1995.

[81] V.Petkov, *Weyl asymptotic of the scattering phase for metric perturbations*, Asymptotic Analysis, **10** (1995), 245-261.

[82] V.Petkov et G.Popov, *Une formule de trace semi-classique et asymtotiques des valeurs propres de l'opérateur de Schrödinger*, C. R. Acad. Sc. Paris, Série I, **t. 323** (1996), 163-168.

[83] V. Petkov, *Sur la conjecture de Lax et Phillips pour un nombre fini d'obstacles strictement convexes*, Séminaire EDP, Exposé No. XI, Ecole Polytechnique, 1995-1996.

[84] V.Petkov and L.Stoyanov, *Singularities of the scattering kernel for trapping obstacles*, Ann. Sci. Ec. Norm. Sup. **29** (1996), 737-756.

[85] V. Petkov and G. Popov,*Semi-classical trace formula and clustering of eigenvalues for Schrdinger operators*, Ann. Inst. H. Poincaré Phys. Théor. 68 (1998), no. 1, 17 -83.

[86] V.Petkov et M. Zworski, *Variation de la phase de diffusion et distribution des résonances*, Séminaire EDP, Exposé No. XII, Ecole Polytechnique, 1998-1999.

[87] V.Petkov, *Analytic singularities of the dynamical zeta function*, Nonlinearity, **12** (1999), 1663-1681.

[88] V.Petkov and M. Zworski, *Breit-Wigner approximation and distribution of resonances*, Commun. Math. Physics, **204** (1999), 329-351. Erratum, Commun. Math. Physics, **214** (2000), 733-735.
[89] V.Bruneau and V. Petkov, *Semiclassical resolvent estimates for trapping perturbations*, Commun. Math. Physics, **213** (2000), 413-432.
[90] V. Petkov, *Scattering amplitude and Poisson relation in obstacle scattering*, Cubo Mat. Educ., **3**, (2000), 361-374.
[91] V.Bruneau and V. Petkov, *Semi-classical resolvent estimates and spectral asymptotics for trapping perturbations*, Demuth, Michael (ed.) et al., Partial differential equations and spectral theory. Proceedings of the PDE 2000 conference, Clausthal, Oper. Theory, Adv. Appl. **126** (2001), 37-40, Birkhäuser, Basel.
[92] V. Petkov and M. Zworski, *Semi-classical estimates on the scattering determinant*, Annales Henri Poincaré, **2** (2001), 675-711.
[93] V. Bruneau and V. Petkov, *Representation of the scattering shift function and spectral asymptotics for trapping perturbations*, Commun. Partial Diff. Equations, **26** (2001), 2081-2119.
[94] V. Petkov, *Lower bounds on the number of scattering poles for several strictly convex obstacles*, Asymptotic Analysis, **30** (2002), 81-91 .
[95] V. Bruneau and V. Petkov, *Meromorphic continuation of the spectral shift function*, Duke Math. Journal, **116** (2003), 389-430.
[96] V. Bruneau and V. Petkov, *Eigenvalues of the reference operator and semiclassical resonances*, J. Funct. Anal. **202** (2003), 571-590.
[97] V. Petkov and L. Stoyanov, *Sojourn times, singularities of the scattering kernel and inverse problems*, Inside Out, Inverse Problems, Publications of MSRI, **47** (2003), 297-332, Cambridge University Press.
[98] M. Dimassi and V. Petkov, *Spectral shift function and resonances for non semi-bounded and Stark Hamiltonians*, J. Math. Pures Appl. **82** (2003), 1303-1342.
[99] J .F. Bony and V. Petkov, *Resonances for non-trapping time periodic perturbations*, J. Phys. A: Math. Gen. **37** (2004), 9439-9449.
[100] M. Dimassi and V. Petkov, *Resonances for magnetic Stark hamiltonians in two dimensional case*, IMRN, **77** (2004), 4147-4179.
[101] M. Dimassi and V. Petkov, *Semiclassical resonances and trace formulae for non semi-bounded Hamiltonians*, Exposé no. XI, Séminaire EDP, Ecole Polytechnique, 2003-2004.
[102] J. F. Bony and V. Petkov, Estimates of the cut-off resolvent for trapping obstacles, Exposé no. II, Séminaire EDP, Ecole Polytechnique, 2005-2006.
[103] V. Petkov, *Global Strichartz estimates for wave equation with time-periodic perturbations*, J. Funct. Anal. **235** (2006), 357-376.
[104] V. Petkov, Local energy decay and Strichartz estimates for the wave eqaution with time-periodic perturbations, Progress in Nonlinear Diff. Equations and their Applications, **69** (2006), 267-285, Birkhäuser, Boston.
[105] J. F. Bony and V. Petkov, *Resolvent estimates and local energy decay of hyperbolic equations*, Annali dell'Università di Ferrara, Sec. VII - Sci. Math. **52**, no. 2,(2006), 233-246.
[106] V. Petkov and L. Stoyanov, *Analytic continuation of the resolvent of the Laplacian and the dynamical zeta function*, C. R. Acad. Sci. Paris, Ser. I **345** (2007), 567-572.
[107] V. Petkov, *Dynamical zeta function for several strictly convex obstacles*, Canadian Math. Bulletin, **51** (2008), 100-113.
[108] F. Colombini, V. Petkov and J. Rauch, *Exponential growth for the wave equation with compact time-periodic positive potential*, Comm. Pure Appl. Math., **62** (2009), 565-582.
[109] V. Petkov and L. Stoyanov, *Singularities of the scattering kernel related to trapping rays*, Nonlinear Diff. Equations and their Applications, **78** (2009), Advances in Phase Space Analysis of Partial Differential Equations, p.235-251, Birkhäuser, Boston.
[110] A. Borichev and V. Petkov, *Estimates of holomorphic functions in zero-free domains*, Archiv der Mathematik, **93** (2009), 47-58.
[111] V. Petkov and L. Stoyanov, *Correlations for pairs of periodic trajectories for open billiards*, Nonlinearity, **22** (2009), 2657-2679.

[112] M. Dimassi and V. Petkov, *Spectral shift function for operators with crossed magnetic and electric fields*, Rev. Math. Physics, **22** (2010), 355-380.

[113] V. Petkov and L. Stoyanov, *Analytic continuation of the resolvent of the Laplacian and the dynamical zeta function*, Analysis & PDE, **3** (2010), 427-489.

[114] M. Dimassi and V. Petkov, *Spectral problems for operators with crossed magnetic and electric fields*, J. Phys. A: Math. Theor. **43** (2010), 474015.

[115] E. Bernardi, A. Bove and V. Petkov, *Cauchy problem for hyperbolic operators with triple characteristics of variable multiplicity*, Journées EDP 2010, http://jedp.cedram.org/jedp-bin/browse?id=JEDP 2010, Exp. No. 4, 13 p.

[116] F. Colombini, V. Petkov and J. Rauch, *Incoming and disappearing solutions for Maxwell's equations*, Proc. AMS, **139**, No. 6 (2011), 2163-2173.

[117] V. Petkov and L. Stoyanov, *Distribution of periods of closed trajectories in exponentially shrinking intervals*, Commun. Math. Phys. **310** (2012), 675-704.

[118] V. Petkov and L. Stoyanov, *Sharp large deviations for some hyperbolic flows*, C. R. Acad. Sci. Paris, Ser. I, **350** (2012), 665-669.

[119] V. Petkov, *Scattering problems for symmetric systems with dissipative boundary conditions*, pp. 337-353 in Studies in Phase Space Analysis and their Applications, Progress in Nonlinear Differential Equations and their Applications, vol. **84** (2013).

[120] J. F. Bony and V. Petkov, *Semiclasssical estimates of the cut-off resolvent for trapping perturbations*, Journal of Spectral Theory, **3** (2013), 399-422.

[121] J. A. Adler, V. Petkov and L. T. Zikatanov, *Numerical approximation of asymptotically disappearing solutions of Maxwell's equations*, SIAM J. Sci. Comput. **35** (2013), S386-S401.

[122] E. Bernardi, A. Bove and V. Petkov, *Cauchy problem for effectively hyperbolic operators with triple characteristics*, C. R. Acad. Sci. Paris, Ser. I, **352** (2014), 109-112.

[123] F. Colombini, V. Petkov and J. Rauch, *Spectral problems for non elliptic symmetric systems with dissipative boundary conditions*, J. Funct. Anal. **267** (2014), 1637-1661.

[124] V. Petkov and L. Stoyanov, *Sharp large deviations for some hyperbolic systems*, Ergodic Theory and Dynamical Systems, **35** (1) (2015), 249-273.

[125] V. Petkov and L. Stoyanov, *Ruelle operators with two parameters and applications*, C. R. Acad. Sci. Paris, Ser. I, **353** (7) (2015), 595-599.

[126] E. Bernardi, A. Bove and V. Petkov, *Cauchy problem for effectively hyperbolic operators with triple characteristics of variable multiplicities*, Journal of Hyperbolic Diff. Equations, **12** (3) (2015), 535-579.

[127] F. Colombini, V. Petkov and J. Rauch, *Eigenvalues for Maxwell's equations with dissipative boundary conditions*, Asymptotic Analysis, **99** (1-2) (2016), 105-124.

[128] V. Petkov and L. Stoyanov, *Spectral estimates for Ruelle transfer operators with two parameters and applications*, DCDS- Serie A, **36** (11) (2016), 6413-6451.

[129] V. Petkov, *Location of eigenvalues for wave equation with dissipative boundary conditions*, Inverse Problems and Imaging, **10** (4) (2016), 1111-1139.

[130] V. Petkov and G. Vodev, *Asymptotics of the number of the interior transmission eigenvalues*, Journal of Spectral Theory, **7** (1) (2017), 1-31.

[131] V. Petkov and G. Vodev, *Localization of the interior transmission eigenvalues for a ball*, Inverse Problems and Imaging, **11** (2) (2017), 355-372.

[132] V. Petkov, *Location and Weyl formula for the eigenvalues of some non self-adjoint operators*, pp. 181-203 in Shocks, Singularities and Oscillations in Nonlinear Optics and Fluid Mechanics, Springer INdAM Series 17 (2017).

[133] F. Colombini and V. Petkov, *Weyl formula for the negative dissipative eigenvalues of Maxwell's equations*, Archiv der Mathematik, DOI 10.1007/s00013-017-1108-2.

[134] T. Nishitani and V. Petkov, *Cauchy problem for effectively hyperbolic operators with triple characteristics*, arXiv, math.AP: 1706.05965.