Bibliography

[1] S. Agmon, *Spectral theory of Schrödinger operators on Euclidean and non-Euclidean spaces*, Comm. Pure Appl. Math. **39** (1986), Suppl, S3-S16.

[2] S. Agmon and L. Hörmander, *Asymptotic properties of solutions of differential equations with simple characteristics*, J. d'Anal. Math. **30** (1976), 1-30.

[3] M. Anderson, A. Katsuda, Y. Kurylev, M. Lassas and M. Taylor, *Boundary regularity for the Ricci equation, geometric convergence and Gel'fand's inverse problem*, Invent. Math. **158**, (2004), 261-321.

[4] R. Alexander, S. Alexander, *Geodesics in Riemannian manifolds with boundary*, Indiana Univ. Math. J. **30** (1981), 481-488.

[5] T. M. Apostol, *Modular Functions and Dirichlet Series in Number Theory*, Springer-Verlag, New York-Heidelberg-Berlin (1976).

[6] N. Aronszajn, *A unique continuation theorem for solutions of elliptic partial differential equations or inequalities of second order*, J. de Math. **36** (1957), 235-247.

[7] K. Astala, M. Lassas and L. Paivarinta, *Calderon's inverse problem for anisotropic conductivity in the plane*, Comm. in P.D.E. **30** (2005), 207-224.

[8] K. Astala and L. Paivarinta, *Calderon's inverse conductivity problem in the plane*, Ann. Math. **163** (2006), 265-299.

[9] T. Aubin, *Nonlinear Analysis on Manifolds, Monge-Ampére Equations*, Springer-Verlag, New York Heidelberg Berlin (1982).

[10] M. I. Belishev, *An approach to multidimensional inverse problems for the wave equation*, Dokl. Akad. Nauk SSSR **297** (1987), 524-527 (Engl. transl. Soviet Math. Dokl. **3**6 (1988), 481-484.

[11] M. I. Belishev, *Boundary control in reconstruction of manifolds and metrics (the BC method)*, Inverse Problems **13** (1997), R1-R45.

[12] M. I. Belishev and A. S. Blagovestchenski, *Multidimensional analogs of the Gel'fand-Levitan-Krein equations in inverse problems for the wave equation*, *Ill-Posed Problems of Mathematical Physics and Analysis*, Nobosibirsk: Nauka (1992), 50-63 (in Russian).

[13] M. I. Belishev and Y. V. Kurylev, *A nonstationary inverse problem for the multidimensional wave equation in the large*, (Russian), ZAP. Nauchn. Sem. LOMI **165** (1987), 21-30; translation J. Soviet Math. **50** (1990), 1944-1951.

[14] M. I. Belishev and Y. V. Kurylev, *To the reconstruction of a Riemannian manifold via its spectral data (BC method)*, Comm. in P. D. E. **17** (1992), 767-804.

[15] R. Benedetti and C. Petronio, *Lectures on Hyperbolic Geometry*, Springer-Verlag, Berlin-Heidelberg (1992).

[16] P. Berard, G. Besson and S. Gallot, *Embedding Riemannian manifolds by their heat kernel*, Geom. Funct. Anal. **4** (1994), 373-398.

[17] R. L. Bishop and R. J. Crittenden, *Geometry of Manifolds*, Academic Press, New York and London (1964).

[18] A. S. Blagovestcenskii, *The local method of solution of the non-stationary inverse scattering problem for an inhomogeneous string*, (Russian), Trudy Mat. Inst. Steklova, **115** (1971), 28-38.

[19] A. S. Blagovestcenskii, *The nonselfadjoint inverse matrix boundary problem for a hyperbolic differential equation*, In : Problems of mathematical physics, **5**, Spectral Theory, (Russian), Izdat. Leningrad Univ., Leningrad (1971), 38-62

[20] D. Borthwick, *Scattering theory for conformally compcat metric with variable curvature at infinity*, J. Funct. Anal. **184** (2001), 313-376.

[21] D. Borthwick, *Spctral Theory for Infinite-Area Hyperbolic Surface*, Birkhäuser, Boston-Basel-Berlin (2007).
[22] D. Borthwick and P. Perry, *Inverse scattering results for manifolds hyperbolic near infinity*, J. Geom. Anal. **21** (2011), 305-333.
[23] A. P. Calderón and R. Vaillancourt, *A class of bounded pseudo-differential operators*, Proc. Nat. Acad. Sci. U.S.A. **69**, 1185-1187 (1969).
[24] I. Chavel, *Riemmanian Geometry - A Modern Introduction*, Camb. Tracts in Math. **108**, Cambridge University Press, Cambridge (1993).
[25] O. A. Chalykh and A. P. Veselov, *Integrability and Huygens' principle on symmetric spaces*, Commun. Math. Phys. **178** (1996), 311-338.
[26] Y. Colin de Verdière, *Une nouvelle démonstration du prolongement méromorphe des séries d'Eisenstein*, C. R. Acad. Sc. Paris, t. **293** (1981), 361-363.
[27] D. Colton and R. Kress, *Integral Equation Methods in Scattering Theory*, John Willey and Sons, (1983).
[28] D. M. Detruck and J. Kazdan, *Some regularity theorems in Riemannian geometry*, Annales Scientifiques de l'Ecole Normale Supérieur, **14**, (1981), 249-260.
[29] A. L. Dixon and W. L. Ferrar, *Integrals of the product of two Bessel functions (II)*, Quart. J. Math. Oxford, **4** (1933), 297-304.
[30] D. Dos Santos Ferreira, C. E. Kenig, M. Salo and G. Uhlmann, *Limiting Carleman weights and anisotropic inverse problems*, Invent. Math. **178** (2009), 119-171.
[31] D. M. Eidus, *The principle of limit ampitude*, Russian Math. Survey, **24** (1969), 97-167.
[32] J. Elstrodt, *Die Resolvente zum Eigenwerteproblem der automorphen Formen in der hyperbolischen Ebene, I, II, III*, Math. Ann. **203** (1973), 295-330, Math. Z. **132** (1973), 99-134, Math. Ann. **208** (1974), 99-132.
[33] J. Elstrodt, F. Grunewald and J. Mennicke, *Groups Acting on Hyperbolic Spaces*, Springer (1998).
[34] L. D. Faddeev, *Expansion in eigenfunctions of the Laplace operator on the fundamental domain of a discrete group on the Lobacevskii plane*, AMS Transl. Trudy (1967), 357-386.
[35] R. Froese and P. Hislop, *Spectral analysis of second order elliptic operators on noncompact manifolds*, Duke Math. J. **58** (1989), 103-129.
[36] S. Gallot, D. Hulin and J.Lafontaine, *Riemannian Geometry*, Second Edition, Springer-Verlag (1980).
[37] I.M. Gel'fand, *Some aspects of functional analysis and algebra*, 1957 Proceedings of the International Congress of Mathematicians, Amsterdam **1954**, Vol 1, 253-276, North-Holland Publishing Co.
[38] I. M. Gel'fand and G. E. Shilov, *Generalized Functions*, Vol 1, Academic Press, New York and London (1964).
[39] D. Gromoll, W. Klingenberg and W. Meyer, *Riemansche Geometrie im Grossen*, Lecture Notes in Mathematics **5**, Springer (1970).
[40] C. Guillarmou, *Meromorphic properties of the resolvent on asymptotically hypebolic manifolds*, Duke Math. J. **129** (2005),
[41] C. Guillarmou and R. Mazzeo, *Resolvent of Laplacian on geometrically finite hyperbolic manifolds*, Invent. Math. **187** (2012), 99-144.
[42] C. Guillamou and F. Naud, *Wave decay on convex co-compact hyperbolic manifolds*, Commun. in Math. Phys. **287** (2009), 489-511.
[43] C. Guillamou and A. Sá Barreto, *Scattering and inverse scattering on ACH manifolds*, J. reine angew. Math. **622** (2008), 1-55.
[44] L. Guillopé, *Fonctions zêta de Selberg et surfaces de géométrie finie*, in Zeta Functions in Geometry (Tokyo 1990), Adv. Stud. Pure Math. **21**, Kinokuniya, Tokyo (1992), 33-70.
[45] L. Guillopé and M. Zworski, *Scattering asymptotics for Riemann surfaces*, Anal. of Math. **145** (1997), 597-660.
[46] G. Hardy, J. E. Littlewood and G. Pólya, *Inequalities*, Cambridge University Press (1952).
[47] M. Hashizume, A. Kowata, K. Minemura and K. Okamoto, *An integral representation of an eigenfucntion of the Laplacian on Euclidean space*, Hiroshima Math. J. **2** (1972), 535-545.
[48] E. Hebey, *Sobolev spaces on Riemannian manifolds*, Lecture Notes in Math. **1635**, Springer-Verlag, Berlin (1996).

[49] B. Helffer and J. Sjöstrand, *Equation de Schrödinger avec champ magnétique et équation de Harper*, Lecture Notes in Phys. **345**, *Schrödinger Operators*, pp. 118-197, eds. H. Holden, A. Jensen, Springer, Berlin-Heidelberg- New York (1989).

[50] S. Helgason, *A duality for symmetric spaces with applications to group representations*, Adv. in Math. **5** (1970), 1-154.

[51] S. Helgason, *Wave equation on homogeneous spaces*, in *Lie Group Representations, III*, Lecture Notes in Math. **1077**, Springer, Berlin (1984), 254-287.

[52] S. Helgason, *The Radon Transform*, Second edition, Birkhäuser, Boston-Basel-Berlin (1999).

[53] P. Hislop, *The geometry and spectra of hyperbolic manifolds* , Proc. Indian Acad. Sci. (Math. Sci.), **104** (1994), 715-776.

[54] E. Holmgren, *Über Systeme von linearen partiellen Differentialgleichungen*, Öfversigt af kongl. Vetenskaps-Akademiens Förhandlingr, Volume **58** (1901), 91-103.

[55] L. Hörmander, *The Analysis of Linear Partial Differential Operators*, Springer, Vol 1 2nd ed. (1989), Vol 2 (1983), Vol 3 (1984), Vol 4 (1984).

[56] L. Hörmander, *A uniqueness theorem for second order hyperbolic differential equations*, Comm. in P.D.E. **17** (1992), 699-714.

[57] T. Ide, H. Isozaki, S. Nakata, S. Siltanen and G. Uhlmann, *Probing for electrical inclusions with complex spherical waves*, Comm. Pure Appl. Math. **60** (2007), 1415-1442.

[58] T. Ikebe and Y. Saito, *Limiting absorption method and absolute continuity for the Schrödinger operator*, J. Math. Kyoto Univ. **12** (1972), 513-542.

[59] H. Isozaki, *Differentiability of generalized Fourier transforms associated with Schödinger operators*, Publ. RIMS. Kyoto Univ. **21** (1985), 789-806.

[60] H. Isozaki, *Asymptotic properties of solutions to 3-partcle Schrödinger equations*, Commun. Math. Phys. **222** (2001), 371-413.

[61] H. Isozaki, *Inverse spectral theory*, in Topics in the Theory of Schrödinger operators, pp. 93-143, eds. H. Araki and H.Ezawa, World Scientific (2003).

[62] H. Isozaki, *Many Body Schrödinger Equation*, Springer Series of Contemporary Mathematics, (2004), Springer, Tokyo, *in Japanese*.

[63] H. Isozaki, *Inverse spectral problems on hyperbolic manifolds and their applications to inverse boundary value problems in Euclidean spaces*, Amer. J. Math. **126** (2004), 1261-1313.

[64] H. Isozaki, *Inverse problems and hyperbolic manifolds*, Contemporary Mathematics **3**48, *Inverse Problems and Spectral Theory*, ed. H. Isozaki, A.M.S., Providence, Rhode Island (2004), 181-197.

[65] H. Isozaki, *The $\overline{\partial}$-theory for inverse problems associated with Schrödinger operators on hyperbolic spaces*, Publications in RIMS. Kyoto Univ. **43** (2007), 201-240.

[66] H. Isozaki, *Inverse boundary value problems in the horosphere - A link between hyperbolic geometry and electrical impedance tomography*, Inverse Probl. Imaging, **1** (2007), 55-82.

[67] H. Isozaki, Y. Kurylev and M. Lassas, *Forward and inverse scattering on manifolds with asymptotically cylindrical ends*, J. Func. Anal. **258** (2010), 2060-2108.

[68] H. Isozaki, Y. Kurylev and M. Lassas, *Conic singularities, generalized scattering matrix, and inverse scattering on asymptotically hyperbolic surfaces*, arXiv : 1108.1577.

[69] H. Isozaki, Y. Kurylev and M. Lassas, *Spectral theory and inverse problem on asymptotically hyperbolic orbifolds*, arXiv : 1312.0421.

[70] H. Iwaniec, *Spectral Methods of Automorphic Forms*, Graduate Studies of Mathmatics Vol 23, American Mathemaical Society, Revista Matemática Iberoamericana (2002).

[71] A. Jensen and P. Perry, *Commutator methods and Besov space estimates for Schrödinger operators*, J. Operator Theory, **14** (1985), 181-188.

[72] F. John, *On linear differential equations with analytic coefficients. Unique continuation of data*, Comm. Pure Appl. Math. **2** (1949), 209-253.

[73] M. S. Joshi and A. Sá Barreto, *Inverse scattering on asymptotically hyperbolic manifolds*, Acta Math. **184** (2000), 41-86.

[74] M. Kashiwara, A. Kowata, K. Minemura, K. Okamoto, T. Oshima, M. Tanaka, *Eigenfunctions of invariant differential operators on a symmetric space*, Annal. of Math. **107** (1978), 1-39.

[75] A. Kasue and H. Kumura, *Spectral convergence of Riemannian manifolds, I*, Tohoku Math. J. **46** (1994), 147-179; *II*, Tohoku Math. J. **48** (1996), 71-120.

[76] A. Katchalov and Y. Kurylev, *Multi-dimensional inverse problem with incomplete initial data*, Comm. in P. D. E. **23** (1998), 55-95.

[77] A. Katchalov, Y. Kurylev and M. Lassas, *Inverse Boundary Spectral Problems*, Chapman and Hall/CRC, Monographs and Surveys in Pure and Applied Mathematics, **123** (2001).

[78] A. Katchalov, Y. Kurylev and M. Lassas, *Energy measurements and equivalence of boundary data for inverse problems on non-compact manifolds*, IMA volumes in Mathematics and Applications (Springer Verlag) *Geometric Methods in Inverse Problems and PDE Control*, Ed. C. Croke, I. Lasiecka, G. Uhlmann, M. Vogelius (2004), 183-214.

[79] A.Katchalov, Y. Kurylev, M. Lassas, N. Mandache, *Equivalence of time-domain inverse problems and boundary spectral problems*, Inverse Problems **20** (2004), 419-436.

[80] T. Kato, *Perturbation Theory for Linear Operators*, 2nd edition, Springer-Verlag, Berlin-Heidelberg-New York (1976).

[81] S. Katok, *Fuchsian Groups*, University of Chicago Press, Chicago, IL, (1992).

[82] S. Kobayashi and K. Nomizu, *Foundations of Differential Geometry*, Vol 2, Interscience Publishers (1969).

[83] M. G. Krein, *Determination of the density of an inhomogeneous string from its spectrum*, (Russian), Doklady Akad. Nauk. SSSR, **76** (1951), 345-348.

[84] M. G. Krein, *On inverse problems for an inhomogeneous string*, (Russian), Doklady Akad. Nauk. SSSR, **82** (1951), 669-672.

[85] T. Kubota, *Elementary Theory of Eisenstein Series*, Kodansha LTD., John Wiley and Sons (1973).

[86] H. Kumanogo, *A calculus of Fourier integral operators on* $\mathbf{R}^n$ *and the fundamental solution for an operator of hyperbolic type*, Comm. in P. D. E. **1** (1976), 1-44.

[87] H. Kumanogo, *Pseudo-Differential Operators*, MIT Press, Cambridge, Massachusetts, and London, England (1981).

[88] Y. Kurylev, *Multidimensional Gel'fand inverse problem and boundary distance map*, in *Inverse Problems Related with Geometry*, (H. Soga. ed.), 1-15 (1997).

[89] O. A. Ladyzhnskaya, *The Boundary Value Problems of Mathematical Physics*, Springer-Verlag, New York-Berlin-Heidelber-Tokyo (1973).

[90] S. Lang, $SL_2(\mathbf{R})$, Addison-Wesley (1975).

[91] M. Lassas and G. Uhlmann, *On determining Riemannian manifold from Dirichlet-to-Neumann map*, Ann. Sci. Ecole Norm. Sup. **34** (2001), 771-787.

[92] P. Lax and R. Phillips, *Scattering Theory for Automorphic Functions*, Ann. of Math. Studies, Princeton Univ. Press (1976).

[93] P. Lax and R. Phillips, *Translation representations for the solutions of the non-Euclidean wave equation*, Comm. Pure Appl. Math. **32** (1979), 617-667.

[94] N. N. Lebedev, *Special Functions and Their Applications*, Dover (1972).

[95] R. Mazzeo, *The Hodge cohomology of a conformally compact metric*, J. Diff. Geom, **28** (1988), 309-339.

[96] R. Mazzeo and R. B. Melrose, *Meromorphic extension of the resolvent on complete spaces with asymptotically constant negative curvatures*, J. Funct. Anal. **75** (1987), 260-310.

[97] R. Mazzeo and A. Vasy, *Scattering theory on* $SL(3)/SO(3)$*: connections with quantum 3-body scattering*, Proc. Lond. Math. Soc. **94** (2007), 545-593.

[98] R. B. Melrose, *Spectral and scattering theory for the Laplacian on asymptotically euclidean spaces*, Spectral and Scattering Theory (M. Ikawa ed.), Marcel Dekker (1994).

[99] R. B. Melrose, *Geometric Scattering Theory*, Cambridge University Press@(1995).

[100] K. Minemura, *Eigenfunctions of the Laplacian on a real hyperbolic space*, J. Math. Soc. Japan **27** (1975), 82-105.

[101] S. Mizohata, *The Theory of Partial Differential Equations*, Cambridge University Press (1973).

[102] K. Mochizuki, *Scattering Theory for Wave Equations*, Kinokuniya Suugaku Sousho, Kinokuniya (1983) (in Japanese).

[103] Moriguchi-Udagawa-Hitotsumatsu, Tables of Mathematical Formulas III, Iwanami Zensho (1959).

[104] W. Müller, *Manifolds with cusps of rank one, spectral theory and* L^2*-index theorem*, Lecture Notes in Math. **1244**, Springer (1987).

[105] W. Müller, *Spectral geometry and scattering theory for certain complete surfaces of finite volume*, Invent. Math. **109** (1992), 265-305.

[106] M. Murata, *A theorem of Liouville type for partial differential equations with constant coefficients*, J. Fac. Sci. Univ. of Tokyo, Sect. IA **21**, (1974), 395-404.

[107] M. Murata, *Lower bounds of growth order for solutions at infinity of partial differential equations*, Suugaku, Vol 32, No 1 (1980), 1-16, Mathematical Society of Japan, Iwanami Shoten.

[108] S. Myers and N. Steenrod, *The group of isometries of a riemannian manifold*, Ann. of Math. **40** (1939), 400-416.

[109] A. Nachman, *Global uniqueness for a two-dimensional inverse boundary value problems*, Ann. of Math. **142** (1995), 71-96.

[110] L. B. Panovski, *Spectral asymptotics of Laplace operators on surfaces with cusps*, Math. Ann. **303** (1995), 281-296.

[111] P. Perry, *The Laplace operator on a hyperbolic manifold I. Spectral and scattering theory*, J. Funct. Anal. **75** (1987), 161-187.

[112] P. Perry, *The Laplace operator on a hyperbolic manifold II. Eisenstein series and the scattering matrix*, J. reine angew. Math. **398** (1989), 67-91.

[113] E. Todd Quinto, *Radon transform, differential equations, and microlocal analysis*, Contemp. Math., **278**, *Radon Transforms and Tomography*, AMS, Providence, RI (2001), 57-68.

[114] J. Ralston, *Gaussian beams and propagation of singularities*, Studies in Partial Differential Equations, MAA Stu. Math. **23**, Washington (1982), 206-248.

[115] M. Reed and B. Simon, *Methods of Modern Mathematical Physics*, Vol 1 (1980, revised), Vol 2 (1875), Vol 3 (1979), Vol 4 (1978), Academic Press.

[116] L. Robbiano, *Théorème d'unicité adapté au contrôle des solutions des problèmes hyperboliques*, Comm. P.D.E. **16** (1991), 789-800.

[117] W. Roelcke, *Das Eigenwertproblem der automorphen Formen in der hyperbolischen Ebene I, II*, Math. Ann. **167** (1966), 292-337 ; **168** (1967), 261-324.

[118] Y. Saito, *Spectral Representations for Schrödinger Oprators with Long-Range Potentilas*, Lecture Notes in Math. **727** (1979), Springer, Berlin-Heidelberg-New York.

[119] T. Sakai, *Riemannian Geometry*, Translations of Mathmatical Monographs, **149**, A. M. S., Providence, RI, (1996).

[120] A. Sá Barreto, *Radiation fields, scattering and inverse scattering on asymptotically hyperbolic manifolds*, Duke Math. J. **129** (2005), 407-480.

[121] A. Sá Barreto, *A support theorem for the radiatio fields o asymptotically Euclidean manifolds*, Math. Res. Lett. **15** (2008), 973-991.

[122] G. Schwarz, *Hodge decomposition - A method for solving boundary value problems*, Lecture Notes in Math. **1607**, Springer (1991).

[123] A. Selberg, *Harmonic analysis and discontinuous groups in weakly symmetric Riemannian spaces with applications to Dirichlet series*, J. Indian Math. Soc. **20** (1956), 47-87.

[124] G. Shimura, *Introduction to the Arithmetic Theory of Automorphic Functions*, Iwanami Shoten, Publishers and Princeton University Press (1971).

[125] D. Tataru, *Unique continuation for solutions to PDEs; between Hörmander's theorem and Holmgren's theorem*, Comm. in P.D.E. **20** (1995), 855-884.

[126] A. Terras, *Harmonic Analysis on Symmetric Spaces and Applications I*, Springer-Verlag (1985).

[127] G. Uhlmann, *Inverse boundary value problems and applications*, Astérisque **207** (1992), 153-211.

[128] H. Umemura, *Theory of Elliptic Functions —Geometry of elliptic curves*, Tokyo University Press (2000), in Japanese.

[129] A. Vasy, *Microlocal analysis of asymptotically hyperbolic and Kerr-de Sitter spaces*, Invent. Math. **194** (2013), 381-513.

[130] A. B. Venkov, *Spectral Theory of Automorphic Functions and Its Applications*, Kluwer Academic Publishers, Dordrecht (1990).

[131] G. N. Watson, *A Treatise on the Theory of Bessel Functions*, Cambridge University Press, (1962).

[132] D. Yafaev, *On solutions of the Shhrödinger equation with radaiaton condition at infinity*, Adv. in Sov. Math. **7** (1991), 179-204.

[133] K. Yosida, *Functional Analysis*, Springer-Verlag, Berlin (1966).

[134] M. Zworski, *Resonances in physics and geometry*, Notices Amer. Math. Soc. **46** (1997), 319-328.