On the uniqueness of the inverse source problem for linear particle transport theory

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References

[1] Bal G., 2004. On the attenuated Radon transform with full and partial measurements, *Inverse Problems* **20**, 399–418.

[2] Bal G. and Tamasan A., 2006. Inverse source problems in transport equations, submitted to *Inverse Problems*.

[3] Beylkin G., 1984. The inversion problem and applications of the generalized Radon transform, *Commun. Pure Appl. Math.* **37**, 579–99.

[4] Bleistein N. and Cohen J. K., 1977. Nonuniqueness in the inverse source problem in acoustics and electromagnetics, *J. Math. Phys.* **18**, 2, 194–201.

[5] Case K. M. and Zweifel P. F., 1967. *Linear Transport Theory*, Addison-Wesley, Reading, Massachusetts.

[6] Dautray R. and Lions J. L., 1993. *Mathematical analysis and numerical methods for science and technology*, Vol. 6, Springer-Verlag, Berlin.

[7] Finch D. V., 1986. Uniqueness for the attenuated x-ray transform in the physical range, *Inverse Problems* **2** 197–203.

[8] Hoenders B. J., 1978. The uniqueness of inverse problems, pp. 41-82 in *Inverse Source Problems in Optics*, H.P. Baltes, Editor, Springer-Verlag, Berlin.

[9] Hoenders B. J., 1997. Existence of invisible nonscattering objects and nonradiating sources, *J. Opt. Soc. Am. A* **14**, 262–266.

[10] Larsen E. W., 1975. The inverse source problem in radiative transfer, *J. Quant. Spec. Radiat. Transf.* **15**, 1–5.

[11] McCormick N. J., 1992. Inverse radiative transfer problems: a review, *Nucl. Sci. Eng.* **112**, 185–198.

[12] Natterer F., 2001. Inversion of the attenuated Radon transform, *Inverse Problems* **17**, 113–119.

[13] Natterer F. and Wubbeling F., 2001. *Mathematical Methods in Image Reconstruction*, Siam, Philadelphia.

[14] Novikov R. G., 2002. An inversion formula for the attenuated X-ray transformation, *Ark. Math.* **40**, 145–167 (Rapport de Recherche 00/05-3, Université de Nantes, Laboratoire de Mathématiques).

[15] Novikov R. G., 2002a. On the range characterization for the two-dimensional attenuated x-ray transformation, *Inverse Problems* **18**, 677–700.

[16] Zweifel P. F., 1999. The canonical inverse problem, *Trans. Th. Statist. Phys.* **28**, 171–179.