Integrated Methods of Correction of Attenuation in Compton Tomographies

Kapranov B. I., Sidulenko O. A., Varga V. V., Baumbach H., Maklashevskij V. A., Filinov V. N.

Introscopy Institute of Tomsk Polytechnical University, 634028, Tomsk, Russia e-mail: chakhlov@introscop.tomsk.su

Abstract

One of the basic preventing factors in reconstruction of the image of internal structure of objects in compton tomography is easing primary and absent-minded beams in the previous layers. Works of many authors [1-6] are devoted to the analysis of correction of influence of absorption. However practical utility of these researches is limited to isolation of considered physical models from a reality. The basic lack of known works is neglected differently thickness a controllable product on section and use of past radiation for correction of attenuation in the previous layers. In clause results of the analysis of opportunities of an iterative method of correction of attenuation are resulted, and also the method of physical correction of attenuation of a primary beam is described due to application of two sources with different energy.