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Ordered subset expectation maximization

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This article is about an algorithm. For Israeli food corporation, see Osem (company).

In mathematical optimization, the **ordered subset expectation maximization** (OSEM) method is an iterative method that is used in computed tomography.

In applications in medical imaging, the OSEM method is used for positron emission tomography, for single photon emission computed tomography, and for X-ray computed tomography.

The OSEM method is related to the expectation maximization (EM) method of statistics. The OSEM method is also related to methods of filtered back projection.

References [edit]

- Hudson, H.M., Larkin, R.S. (1994) "Accelerated image reconstruction using ordered subsets of projection data", *IEEE Trans. Medical Imaging*, 13 (4), 601–609 doi:10.1109/42.363108 ₺
- Hutton, Brian F., Hudson, H. Malcolm, Beekman, Freek J. (1997) "A clinical perspective of accelerated statistical reconstruction", *European Journal of Nuclear Medicine and Molecular Imaging*, 24 (7), 797–808 doi:10.1007/BF00879671 ₺
- Xuan Liu; Comtat, C.; Michel, C.; Kinahan, P.; Defrise, M.; Townsend, D. (2001) "Comparison of 3-D reconstruction with 3D-OSEM and with FORE+OSEM for PET", *IEEE Transactions on Medical Imaging*, 20 (8), 804–814 doi:10.1109/42.938248 &

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