Automated Estimation Regularization Parameter for Diffuse Optical Tomography Using Minimal Residual Method

**All Programs are based on Open-Source NIRFAST ([**[**Link**](http://www.google.com/url?q=http%3A%2F%2Fwww.dartmouth.edu%2F%257Enir%2Fnirfast%2F&sa=D&sntz=1&usg=AFQjCNGy0Qj1Ase3wF2EPCnMRDNOteJ80A)]( <http://www.dartmouth.edu/~nir/nirfast/>)**) and are written as MATLAB functions.**

**#**Minimal Residual Method BasedSelection of Regularization Parameter (includes reconstruction part as well)

**#** Generalized Cross-Validation BasedSelection of Regularization Parameter (includes reconstruction part as well\*\*)

These computational algorithms are used for performing the work presented in the following manuscript:

Ravi P. K. Jagannath and Phaneendra K. Yalavarthy, “Minimal Residual Method Provides Optimal Regularization Parameter for Diffuse Optical Tomography," Journal of Biomedical Optics 17(10), 106015:1-7 (2012). PDF

Created on: July 14, 2012. Updated on: September 11, 2012.

Note: This code does not come with any guarantees, can be used for any purpose.

\*\* Adapted from Regularization Tools ([Version: 4.1](http://www.google.com/url?q=http%3A%2F%2Fwww2.imm.dtu.dk%2F%257Epch%2FRegutools%2F&sa=D&sntz=1&usg=AFQjCNHIl4GNUv_7xBKYfGdYoZOWRDFPHQ))