

**MULTISPECTRAL PRERECONSTRUCTION INFORMATION ENHANCING  
FLUORESCENCE MOLECULAR TOMOGRAPHY**

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Fluorescence molecular tomography is an optical imaging technique for quantifying fluorescence in vivo. It suffers from being mathematically ill-conditioned, resulting in non-unique solutions to the reconstruction problem. In an attempt to reduce the number of possible solutions, we propose a method to preprocess the recorded data using multispectral information. This simple approach provides regularization of the reconstruction. Evaluation is performed by experimental measurements on tissue phantoms.