## **Resource Summary Report**

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# **MITK Diffusion**

RRID:SCR\_006846

Type: Tool

## **Proper Citation**

MITK Diffusion (RRID:SCR\_006846)

#### **Resource Information**

**URL:** http://www.mitk.org/DiffusionImaging

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**Description:** A selection of image analysis algorithms for the processing of diffusion-weighted MR images. Features & Highlights \* Tensor and q-ball reconstruction \* Glyph visualization \* Quantification and partial volume clustering of tensor and q-ball images \* Global fiber tractography, visualization, and tract post-processing \* Brain network statistics and visualization (connectomics) \* Interactive exploration of Tract-based spatial statistics (TBSS) results \* Intra-voxel incoherent motion (IVIM) estimation \* Synthetic data generation Additional system specific requirements: \* Windows: If you have problems running the Windows application, please install the Microsoft Redistributable Packages for VS 2008: 32 bit or 64 bit \* Linux: the Qt framework, version 4.6.2 or later Tested systems: Windows 7, Windows Vista; Ubuntu 12.04 and newer; OS X 10.6 (Snow Leopard), OS X 10.8 (Mountain Lion) The OS X 10.6 installer is compatible with OS X 10.7 (Lion) so there is no dedicated disk image build under 10.7. The MITK Diffusion application is based on the MITK research platform and the most of it is open-source. The available code is embedded into the source code of MITK as a module and can be accessed through the public git repository.

Abbreviations: MITK-DI

Synonyms: MITK Diffusion Imaging

**Resource Type:** software toolkit, software application, software resource, image analysis software, data processing software, source code, data visualization software, image processing software

**Defining Citation:** PMID:23038239

**Keywords:** tractography, diffusion tensor imaging, q-ball imaging, diffusion mri, data processing, analysis, visualization, connectomics, fiber tractography, tract post processing, glyph visualization, tensor reconstruction, q-ball reconstruction, scalar index, connectivity analysis, image reconstruction, modeling, quantification, segmentation, fiber tracking, macos, windows, os independent, linux, c++, dicom, nifti-1, nrrd, other format

#### **Funding:**

Availability: Most of it, Simplified BSD License

Resource Name: MITK Diffusion

Resource ID: SCR\_006846

Alternate IDs: nlx\_153917

**Alternate URLs:** http://www.nitrc.org/projects/mitk-diffusion

**Record Creation Time: 20220129T080238+0000** 

**Record Last Update: 20250420T014348+0000** 

### **Ratings and Alerts**

No rating or validation information has been found for MITK Diffusion.

No alerts have been found for MITK Diffusion.

### **Data and Source Information**

Source: SciCrunch Registry

## **Usage and Citation Metrics**

We found 3 mentions in open access literature.

**Listed below are recent publications.** The full list is available at <u>NIF</u>.

Loh M, et al. (2024) Effect of simultaneous multislice imaging, slice properties, and repetition time on the measured magnetic resonance biexponential intravoxel incoherent motion in the liver. PloS one, 19(8), e0306996.

Mayer P, et al. (2018) Changes in the microarchitecture of the pancreatic cancer stroma are linked to neutrophil-dependent reprogramming of stellate cells and reflected by diffusion-weighted magnetic resonance imaging. Theranostics, 8(1), 13.

Horn A, et al. (2016) Toward a standardized structural-functional group connectome in MNI

space. NeuroImage, 124(Pt A), 310.