



2nd
Last
Wednesday
Meeting

Proposal for joint research



Team A – F

- A. Mobile C-arm CT reconstruction
based on prior knowledge on intra-operation
- B. Investigation of Resting-state Network Change
in Alzheimer disease Mouse Model with Varying Anesthesia Level
- C. Metal artifact reduction for X-ray CT with deep learning
- D. Quantitative 3D Nuclei Modeling based on Shape Prior Segmentation
- E. PET / MR system
- F. Multimodal analysis of human emotions:
a neurophysiological and facial dynamics approach



Team A: Mobile C-arm CT reconstruction based on prior knowledge on intra-operation

교수님	학과	연구실	연구 분야
	나종범 Electrical Engineering	ISL	Registration, Multi-modality, CT reconstruction (motion), Image processing, (X-ray, PET, CT...)
	조승룡 Nuclear and Quantum Engineering	MIRLAB	CT methodology, Reconstruction, Radiation therapy



Team B: Investigation of Resting-state Network Change in Alzheimer disease Mouse Model with Varying Anesthesia Level

교수님	학과	연구실	연구 분야
	정용 Bio and Brain Engineering	CNI	Clinical image analysis (AD, PD), Network analysis, Brain mapping, fMRI, MEG.
	박성홍 Bio and Brain Engineering	MRILAB	MRI sequence, fMRI, perfusion imaging, MT imaging, Dual echo imaging



Team C: Metal artifact reduction for X-ray CT with deep learning

교수님	학과	연구실	연구 분야
	김준모 Electrical Engineering	SIIT	Computer vision, Machine learning.
	예종철 Bio and Brain Engineering	BISPL	Optimization, Various Modalities, Reconstruction



Team D: Quantitative 3D Nuclei Modeling based on Shape Prior Segmentation

교수님	학과	연구실	연구 분야
	박진아 Computer Science	CGV	Organ modeling, Interface, Computer graphics, HCI
	이창욱 Mathematical Sciences	CMI	Image Processing, Inverse problem, Domain decomposition (P.D.E.) (CT, MR)

Team E: PET / MR system

교수님	학과	연구실	연구 분야
	박현욱 Electrical Engineering	ICSL	MRI pulse sequence, MRI reconstruction, fMRI, MRS (Magnetic resonance spectroscopy)
	조규성 Nuclear and Quantum Engineering	RDMIS	Rad. sensor, Data acquisition, PET system (X-ray, PET, CT, ...)

Team F: Multimodal Analysis of Human Emotions: a neurophysiological and facial dynamics approach

교수님	학과	연구실	연구 분야
	정범석 Graduate School of Medical Science	CNDL	Clinical image analysis (ADHD, stress, ...), Network analysis, fMRI, MEG.
	노용만 Electrical Engineering	IVY	Image & video processing, computer-aided detection/diagnosis

Thanks