THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學

FACULTY OF ENGINEERING 工程學院 WHERE CONCEPTS BECOME REALITY

BME DEPARTMENT OF BIOMEDICAL ENGINEERING 生物醫學工程學系

BME RESEARCH SEMINAR

Diffusion MRI in Neuroimaging

DATE:	TIME:	VENUE:
13 Aug 2019 (Tuesday)	**2:00pm - 3:30pm**	**QR504, The Hong Kong Polytechnic University**

OVERVIEW OF THE LECTURE:

Diffusion MRI is a powerful tool for noninvasive mapping of the microstructural organization in the brain. This lecture will start with the history and principles of diffusion MRI, and then focus on its recent development, particularly, the development of diffusion MRI based microstructural imaging. I will also talk about my own research on high-resolution diffusion MRI sequences and the time-dependent diffusion MRI technique. We will go over several seminal applications of diffusion MRI in both clinical and basic science, and finally, discuss the potential future of this exciting field.

Supporting Organizations:

UFFC EMB IEEE Hong Kong - Macau Joint Chapter HKIE THE HONG KONG INSTITUTION OF ENGINEERS 香港工程師學會

GUEST SPEAKER :

Dr. Wu Dan

Research Professor

College of Biomedical Engineering and Instrumental

Zhejiang University

About the Speaker:

Dr. Wu Dan is a currently a research professor at the College of Biomedical Engineering and Instrumental Science at Zhejiang University, a national "Youth Thousand Talents" awardee. She obtained her bachelor's degree from the Department of Biomedical Engineering (BME) at Zhejiang University in 2009, her mater and doctoral degrees from BME at Johns Hopkins University in 2011 and 2015. She served as an Assistant Professor of Johns Hopkins University from 2016 to 2018.

Dr. Wu's research focuses on the development of magnetic resonance imaging (MRI) techniques, including the development of fast and high-resolution pulse sequences, diffusion MRI based microstructural imaging, and atlas-based neuroimage analysis. She has published over 40 papers (including more than 20 papers first-author and 8 corresponding-author papers) in top journals of the field. She is the principle investigator of several national grants, including the R01, R21 and R03 projects of the National Institute of Health in the United States and key projects of the National Science Foundation of China.