## Cambridge – Tsinghua Engineering Forum

Norwich Auditorium Seminar Room, Roger Needham Building,

7 JJ Thomson Ave, Cambridge CB3 0FA

Tuesday 2<sup>nd</sup> October 2018

Opening Ceremony (09:00-09:30) Chaired by: Prof Daping CHU (Department of Engineering, University of Cambridge)					
<b>Prof Chris ABELL</b> (Pro-Vice-Chancellor for Research, University of Cambridge)					
<b>Prof Zheng YOU</b> (Vice President, Tsinghua University)					
		<b>o</b> about Tsinghua University			
	Group Photo	ograph in the Seminar Room			
Morning Session I (09:30-10:45) Chaired by: Dr Robert MULLINS					
(Computer Laboratory, University of Cambridge)					
Prof Ian WHITE (Cambridge)	0930-0955	Wireless communications and sensing for next generation			
Prof Huaqiang WU (Tsinghua)	0955-1020	Computing in memristor: from device to system			
Prof Richard PENTY (Cambridge)	1020-1045	Quantum communications			
Morning break	1045-1110				
Morning Session II (11:10-12:50)					
Chaired by: Prof Huaqiang WU (Institute of Microelectronics, Tsinghua University)					
Prof Xue WANG (Tsinghua)	1110-1135	Introduction to artificial intelligence & information sensing			
Dr Shouyi YIN (Tsinghua)	1135-1200	Towards deploying AI everywhere: high energy efficient reconfigurable neural network processor for deep learning applications			
Dr Robert MULLINS (Cambridge)	1200-1225	Can we train and run neural networks a 1000x faster?			

Prof Jun ZHU (Tsinghua)	1225-1250	Machine learning under uncertain and adversarial environments			
Lunch break & Visit to the Cavendish Museum	1250-1400	Cavendish Museum, University of Cambridge			
Afternoon Session I (14:00-15:15)					
Chaired by: Prof Xue WANG (Department of Precision Instrument, Tsinghua University)					
Prof Andrew FLEWITT (Cambridge)	1400-1425	High Target Utilisation Sputtering of P-type Cuprous Oxide Thin Films and their Performance in Thin Film Transistors			
Prof John ROBERTSON (Cambridge)	1425-1450	Chemical vapor deposition of graphene and CNTs for functional thin films and interconnects			
Dr Hannah JOYCE (Cambridge)	1450-1515	Engineering III-V semiconductor nanowires for optoelectronic device applications			
Afternoon break	1515-1535				
	Af	ternoon Session II (15:35-17:15)			
Chaired by: Dr Hannah JOYCE (Electrical Engineering, University of Cambridge)					
Prof Lianqing ZHU (BISTU)	1535-1600	Optical fibre sensing techniques and its applications in aircraft monitoring			
Dr Guangkai SUN (BISTU)	1600-1625	Optical fibre sensing technology in morphing aircrafts and soft robotics			
Dr Xiaomin XU (Cambridge)	1625-1650	Application of Fibre Optic Strain Sensors in Civil Engineering			
Dr Fan ZHANG (BISTU)	1650-1715	Cell Traction Force Measurement: Applications and Challenges			
Closing Remarks (17:15-17:20)					
Prof Daping CHU (Cambridge)					
Welcome Dinner					
(19:00-21:00, Riverside Restaurant, University Centre)					

Pro-Vice-Chancellor for Research

Head, Department of Engineering

Head, Electrical Engineering Division

Department of Engineering, Master of Sidney Sussex

Department of Engineering, Master of Jesus College

Head, International Relations, Uni of Cambridge

Head, School of Technology

Head, Computer Laboratory

Department of Engineering

**Computer Laboratory** 

## **List of Attendees**

University of Cambridge (15 people):

- (1) Prof Chris ABELL
- (2) Prof Richard PRAGER
- (3) Dr Claire BARLOW
- (4) Prof Ann COPESTAKE
- (5) Prof Andrew FLEWITT\* (2-3pm)
- (6) Prof Daping CHU
- (7) Dr Hannah JOYCE\*
- (8) Dr Robert MULLINS\*
- (9) Prof Richard PENTY\*
- (10) Prof John ROBERTSON\*
- (11) Prof Ian WHITE (am only)\*
- (12) Dr Xiaomin XU\*
- (13) Dr Cedric KECHAVARZI
- (14) Mr Philip KEENAN
- (15) Mr Stephen DAVISON

Tsinghua University (12 people):

(1)	Prof Zheng YOU	Tsinghua University	Vice President	
(2)	Mr Zesheng PAN	Deputy Director of Government Relations Office		
		Secretary to the Vice President		
(3)	Prof Xue WANG*	Department of Precision Instrument	Professor	
(4)	Prof Jun ZHU*	Department of Computer Science	Professor	
(5)	Prof Huaqiang WU*	Institute of Microelectronics	Professor	
(6)	Dr Fei XING	Department of Precision Instrument	Associate Professor	
(7)	Dr Jiahao ZHAO	Department of Precision Instrument	Associate Professor	
(8)	Dr Shouyi YIN*	Institute of Microelectronics	Associate Professor	
(9)	Dr Shijie YU	Department of Precision Instrument	Research Fellow	
(10)	Ms Moyuan ZENG	(contact at Tsinghua: moyuanzeng@mail.tsinghua.edu.cn)		
	Beijing Innovation C	Centre for Future Chips International Cooperation Officer		
(11)	Dr Zhuocun LIN	TusPark at Cambridge Science Park		
(12)	Dr Wei MENG	TusPark at Cambridge Science Park		

BISTU (Beijing Information Science and Technology University) (6 people, all from School of Instrument Science and Opto-electronics Engineering):

<ol><li>Prof Lianqing ZHU*</li></ol>	Professor	
(2) Dr Feng LIU	Associate Professor	
(3) Dr Guangkai SUN*	Associate Professor	
(4) Dr Fan ZHANG*	Associate Professor	(contact at BISTU: zhangfan@bistu.edu.cn)
(5) Dr Shaohua CHEN	Associate Professor	
(6) Dr Hong Ll	Lecturer	

Chinese Academy of Sciences (1 person)

(1) Prof Zichen ZHANG	Institute of Microelectronics	Professor

\* Attendee who will give a talk (14 talks in total, 7x Cambridge, 4x Tsinghua, 3x BISTU)