

Summary of Program:

The Tenth Annual Conference of the Physical Society of Hong Kong (4 th June 2005)				
9:00 a.m.	Registration (outside Lecture Theatre 9 (LT9))			
9:15 a.m.	Welcome Speech (LT9)			
9:25-10:25 a.m.	Plenary talk (LT9) Chaired by: K S Chan Title: Focusing with negative medium Professor C T Chan, Department of Physics, HKUST			
Session	CME1(LT9)	CMT1(LT8)	INT1 (LT7)	PRESS (LT5)
<i>Chaired by:</i>	<u>W Y Tam</u>	<u>R Q Zhang</u>	<u>H F Chau</u>	<u>H F Cheung</u>
10:30 a.m.	P Y Cheng HKBU3	B Hu HKBU6	H Guo CU1	PRESS Workshop
10:45 a.m.	S Luo CITYU5	S L Sun CITYU9	B Hu HKBU2	
11:00 a.m.	<i>COFFEE BREAK</i>	<i>COFFEE BREAK</i>	<i>COFFEE BREAK</i>	
11:15 a.m.	T L Cheung CITYU3	S W Cheng CITYU8	G Dong HKBU4	
11:30 a.m.	Y F Mei CITYU1	INV SQ Shen HKU5	G L Li HKU4	
11:45 a.m.	Y J Wang UST13	INV SQ Shen HKU5	T Li HKU1	
12:00 p.m.	AGM (LT9) Chaired by P. M. Hui			
12:30 p.m.				
1:00 p.m.	Lunch			
Session	CME2 (LT9)	CMT2(LT8)	INT2 (LT7)	PC (LT5)
<i>Chaired by:</i>	<u>PM Hui (K S Chan from 5:00pm)</u>	<u>S Q Shen</u>	<u>D Ong</u>	<u>K S Wong</u>
2:00 p.m.	F K Lee UST3		INV R Chan HKBU1	
2:15 p.m.	X Zhang UST11	J T K Wan UST6	INV R Chan HKBU1	M H Kok UST10
2:30 p.m.	G Wu HKBU5	B A Foreman UST2	S Liang HKBU10	L Wu UST8
2:45 p.m.	WW Wu HKBU14	Y J Wang CITYU7	S Hui HKBU11	L Wu UST9
3:00 p.m.	K L Tong HKBU12	C S Lin CITYU6	CH Cai HKBU13	J Xu UST14
3:15 p.m.	<i>COFFEE BREAK</i>	<i>COFFEE BREAK</i>	<i>COFFEE BREAK</i>	<i>COFFEE BREAK</i>
3:30-4:30 p.m.	Plenary talk (LT9) Chaired by K S Chan Title: The New Spin on Semiconductors Professor Shou-Cheng Zhang, Department of Physics, Stanford University			
4:35 p.m.	K L Ma CITYU2	Y Zhou UST12	K H Ho HKU3	J C W Lee UST5
4:50 p.m.	T Y Lui CITYU4	J Ng UST4	W C Man HKU2	Z Hang UST1
5:05 p.m.	K M Ng HKBU8	J Wang HKBU7	W S Tam CU2	J T K Wan UST7
5:20pm	S K Ho HKBU9			

CMT: Condensed matter theory

CME: Condensed matter experiment

PC: Photonic Crystals and Related Topics

INT Interdisciplinary Physics

INV Invited Talk

PRESS: Physics Research Experiences for Sixth-form Students

Time	Registration
9:00 am	Outside Lecture theatre 9 (LT9)

Time	Welcome Speech
9:15 am	Lecture Theatre 9 (LT9)

Time	Plenary Talks (LT9) Session Chair: K S Chan
9:25-10:25 am	“Focusing with negative medium” Prof. C T Chan, HKUST
3:30-4:30 pm	“The New Spin on Semiconductors” Prof. Shou-Cheng Zhang, Stanford University

Time	CME1 (LT9) Session Chair: W Y Tam
10:30 am CME1-1	HKBU3: Concentration effect on the photoluminescence and lifetime of Eu^{3+} activated $\text{YAl}_3\text{B}_4\text{O}_{12}$ <u>Pui Yan Cheng</u> , Jian Xu, Ka Man Ng, and Kok Wai Cheah. Baptist University
10:45 am CME1-2	CITYU5: “Buried tungsten silide layer in silicon on insulator substrate by Smart-Cut” Suhua Luo, Weili Liu, Miao Zhang, Chenglu Lin, Z T Song & Paul K Chu. City University of Hong Kong
11:00 am	Coffee Break
11:15 am CME1-3	CITYU3: “Thermal and Mechanical Properties of Cu-Zr-Al Bulk Metallic Glasses” T. L. Cheung and C. H. Shek. City University of Hong Kong
11:30 am CME1-4	CITYU1: “Room-temperature Electrosynthesized ZnO film with Strong (0002) Orientation” Y. F. Mei, and G. G. Siu. City University of Hong Kong
11:45 am CME1-5	UST13: “Time evolution study of spinodal dewetting” Y J Wang and O K C Tsui. HKUST

Time	CME2 (LT9) Session Chair: P M Hui/K S Chan
2:00 pm CME2-1	UST3: "Substrate Patterning for Liquid Crystal Alignment by Optical Interference" Xuemin Lu, <u>Fuk Kay Lee</u> , F. C. Xie, Ping Sheng, H. S. Kwok, W. Y. Tam, & Ophelia K C. Tsui. HKUST
2:15 pm CME2-2	UST11: "Autophobic Dewetting of Polystyrene Films" <u>Xueyun Zhang</u> and Ophelia K. C. Tsui, HKUST
2:30 pm CME2-3	HKBU5: "The electro-oxidative activity of cysteine on the Au electrode as evidenced by surface enhanced Raman scattering" Zhaojun Liu, <u>Guozhen Wu</u> . Baptist University
2:45 pm CME2-4	HKBU14: "2-photon luminescence characteristics of organic/inorganic hybrid systems" <u>W. W. Wu</u> , K. F. Li, K. W. Cheah, D. W. Pang, and Louis M. L. Leung. Baptist University
3:00 pm CME2-5	HKBU12: "Study on the ambipolar characteristics of oxadiazole-triphenylamine based compounds and their application to homojunctions OLEDs" <u>K.L.Tong</u> , S.K.So, Tik H.Lee, L.M.Leung, M.Y.Yeung, K.H.Lee, C.F.Lo. Baptist University
3:15 pm	Coffee Break
4:35 pm CME2-6	CITYU2: "Electrical properties of nitrogen incorporated in nanodiamond films" <u>K.L. Ma</u> , W.J. Zhang, Y.M. Chong, K.M. Leung, I. Bello and S.T. Lee. City University of Hong Kong
4:50 pm CME2-7	CITYU4: "Copper-doped effect on low temperature photoluminescence from Cd _{1-x} Zn _x S nanoribbons" T. Y. Lui, D.D.D. Ma, J. A. Zapien, Y. K. Liu, H. Tang and S. T. Lee. City University of Hong Kong
5:05 pm CME2-8	HKBU8: "Inorganic/organic hybrid white-light phosphor for solid state illumination" <u>K.M. Ng</u> , K.W. Cheah, Jian Xu, and M.L Gong. Baptist University
5:20pm CME2-9	HKBU9: "Sensitive elemental analysis by ArF laser induced atomic fluorescence" <u>Sut Kam Ho</u> and Nai Ho Cheung. Baptist University

Time	CMT1 (LT8) Session Chair: R Q Zhang
10:30 am CMT1-1	HKBU6: “Dynamical mode locking in the dynamics of commensurate structures with asymmetric deformable substrate potential” Bambi Hu and Jasmina Tekić. Baptist University
10:45 am CMT1-2	CITYU9: “Ca/PFO interaction in organic light-emitting device- a theoretical study” <u>S L Sun</u> and R Q Zhang. City University of Hong Kong
11:00 am	Coffee Break
11:15 am CMT1-3	CITYU8: “Temperature profile and pressure effect on the growth of silicon nanowires” <u>S W Cheng</u> and H F Cheung. City University of Hong Kong
11:30 am CMT1-4	Invited Talk HKU5: ”Spin Hall effect in quantum Hall regime” S Q Shen. University of Hong Kong

Time	CMT2 (LT8) Session Chair: S Q Shen
2:15 pm CMT2-1	UST6: “Liquid crystals alignments on heterogeneous surfaces” J T K Wan, O K C Tsui, H S Kwok and P Sheng. HKUST
2:30 pm CMT2-2	UST2: “Interface band mixing from first principles” B A Foreman. HKUST
2:45 pm CMT2-3	CITYU7:” Insight into the interaction of a lithium atom with single-walled carbon nanotubes: an ab initio study” <u>Y J Wang</u> and R Q Zhang. City University of Hong Kong
3:00 pm CMT2-4	CITYU6: “ Interaction of water clusters (H ₂ O) _n (n=1-6) with graphite surface” <u>C S Lin</u> and R Q Zhang. City University of Hong Kong
3:15 pm	Coffee Break
4:35 pm CMT2-5	UST12: “Spinless hardcore bosons on checkerboard lattice near half filling” Y Zhou. HKUST
4:50 pm CMT2-6	UST4: “Strong optical force induced by morphology dependent resonances” J Ng, Z Lin, C T Chan and P Sheng. HKUST

5:05 pm CMT2-7	HKBU7: “Quantum delocalization of the classical pinned state in Frenkel-Kontorova model” Jiaxiang Wang and Bambi Hu. Baptist University

Time	INT1 (LT7) Session Chair: H F Chau
10:30 am INT1-1	CU1: “ Relation of scaling behaviour of velocity and temperature fluctuations in turbulent Rayleigh-Benard convection” E C S Ching and <u>H Guo</u> . Chinese University of Hong Kong
10:45 am INT1-2	HKBU2: “ Control of heat conduction by periodicity tuning” B Hu and L Yang. Baptist Universtiy
11:00 am	Coffee Break
11:15 am INT1-3	HKBU4: “Management of Bose-Einstein Condensates by spatially periodical modulation of the atomic s-wave scattering length” G Dong and B Hu. Baptist University
11:30 am INT1-4	HKU4: “ Einstein’s question about whether a complete description of reality exists remains open” G L Li and V O K Li. University of Hong Kong
11:45 am INT1-5	HKU1: “ Search of quasisoft x-ray sources in galatic center SGR A*” <u>T Li</u> , A K H Kong, R Di Stefano and C S J Pun. University of Hong Kong

Time	INT2 (LT7) Session Chair: D Ong
2:00 pm INT2-1	Invited Talk HKBU1: “Underwater optical sensing for in situ measurement of marine phytoplankton” <u>R K Y Chan</u> , X Z Wang and A S K Cheng. Baptist University
2:30 pm INT2-2	HKBU10: “In silico simulations of e coli metabolic network” S Liang S Hui and L Tang. Baptist University
2:45 pm INT2-3	HKBU11: “Topological characteristics of yeast metabolic network” S Hui, S Liang and L Tang. Baptist University
3:00 pm INT2-4	HKBU13: “Mechanism characterization of transcriptional regulation in budding yeast cell cycle”

	C Cai, C Wang and L Tang. Baptist University
3:15 pm	Coffee Break
4:35 pm INT2-5	HKU3: “ Study of wealth inequality in the minority game” <u>K H Ho</u> F K Chow and H F Chau. University of Hong Kong
4:50 pm INT2-6	HKU2: “ The relevance of memory in minority game” K H Ho, <u>W C Man</u> , F K Chow and H F Chau. University of Hong Kong
5:05 pm INT2-7	CU2: “ Aspect-ratio dependence of heat transport by given velocity fields” E C S Ching and <u>W S Tam</u> . Chinese University of Hong Kong

Time	PC (LT5) Session Chair: K S Wong
2:15 pm PC-1	UST10: “Tuneable optical properties of 1D photonic crystals in planar silver nano-particles gelatin emulsion” <u>M H Kok</u> , R Ma, J C W Lee, W Y Tam, C T Chan and P Sheng. HKUST
2:30 pm PC-2	UST8: “Characterization of photo-cross-linkable light-emitting polymers” L Wu, J Hua, B Z Tang, and K S Wong. HKUST
2:45 pm PC-3	UST9: “Fabrication of 1D, 2D and 3D photonic crystals by single refracting prism laser holographic lithography” L Wu, Y Zhong, C T Chan, K S Wong and G Wang. HKUST
3:00 pm PC-4	UST14: “Realization of optical periodic quasi-crystals using holographic lithography” X Wang, <u>J Xu</u> , J C W Lee, Y K Pang, W Y Tam, C T Chan and P Sheng. HKUST
3:15 pm	Coffee Break
4:35 pm PC –5	UST5: “Polarization gap in spiral structure” J C W Lee and C T Chan. HKUST
4:50 pm PC-6	UST1: “Directive emission from quasi-periodic planar metamaterial substrates” H Li, <u>Z Hang</u> Y Qin L Zhou, Y Zhang H Chen and C T Chan
5:05 pm PC –7	UST7: “Thermal emission by photonic micro-textured surfaces” J T K Wan and C T Chan. HKUST

