

THEO MURPHY INTERNATIONAL SCIENTIFIC MEETING

Amazing (cavitation) bubbles: great potentials and challenges

The Royal Society at Chicheley Hall: Home of the Kavli Royal Society International Centre, Tuesday 4 –Wednesday 5 November 2014
Organised by Professor Shengcai Li, Professor Christopher Earls Brennen and Professor Yoichiro Matsumoto

DAY 1				DAY 2			
SESSION 1		SESSION 2		SESSION 3		SESSION 4	
Chair: Andrea Prosperetti		Chair: Manolis Gavaises		Chair: Roger Arndt		Chair: Yoshinobu Tsujimoto	
09.00	Welcome by the Royal Society & Shengcai Li						
09.05	Christopher Earls Brennen The amazing world of bubbles	13.30	Chao-Hsung Hsiao Numerical bubbles in Biomedicine	09.00	Andrea Prosperetti The stiffness of vapor bubbles and the effect of dissolved gas	13.30	Eduard Egusquiza Cavitation bubbles in hydraulic turbines: effects and detection
09.30	Discussion	14.00	Discussion	09.30	Discussion	14.00	Discussion
09.45	Yoichiro Matsumoto Horizon of biomedical bubbles	14.15	Eleanor Stride Magnetically targeted microbubbles for ultrasound imaging and therapy	09.45	Jean-Pierre Franc Towards numerical prediction of cavitation erosion	14.15	Shengcai Li Tiny bubbles challenge giant turbine
10.15	Discussion	14.45	Discussion	10.15	Discussion	14.45	Discussion
10.30	Coffee	15.00	Tea	10.30	Coffee	15.00	Tea
11.00	John Blake The kelvin impulse and its applications	15.30	Khoo Boo Cheong Oscillating bubble dynamics in biomedical and dental applications	11.00	Knud Aage Morch Cavitation inception from bubble nuclei	15.30	Roger Arndt, Thomas Van Terwisga and Pepijn Pennings The singing vortex
11.30	Discussion	16.00	Discussion	11.30	Discussion	16.00	Discussion
11.45	Qian Xi Wang Bubble dynamics in a compressible liquid in contact with a rigid boundary	16.15	Isaac Kuo-Kang Liu Cell mechanics in biomedical cavitation	11.45	Tim Colonius Bubble dynamics in medicine	16.15	Panel discussion/Overview (future directions)
12.15	Discussion	16.45	Discussion	12.15	Discussion	17.00	CLOSE

12.30	LUNCH	17.00	CLOSE	12.30	LUNCH		
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