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In conjunction with the Victorian Partnership for Advanced Computing (VPAC)

National ICT Australia invites you to the

Victoria Research Laboratory

Big Picture Seminar Series

Wednesday March 14, 2007



The talk will be followed by light refreshments and an opportunity to meet the speaker.

REGISTRATION IS ESSENTIAL FOR THIS FREE EVENT

RSVP to vrlss@nicta.com.au by Friday March 9, 2007

Public Parking is available at an hourly rate at the University Square car park. Enter via Bouverie Street. Local street parking is also available.



When: 4-5 pm, Wednesday March 14 2007

Where: Theatre GM15, Law School (Building 106), University of Melbourne, Parkville

Keith Hanna Director of Marketing Communications, Fluent Europe Ltd, England CFD in Sport – Performance Enhancement Without Drugs!

ABSTRACT: Advanced computer-aided engineering simulations are increasingly being used in elite sports around the world to understand underlying aerodynamic and hydrodynamic phenomena and to gain a legal competitive advantage over other athletes, teams and equipment manufacturers. This lecture will outline how Computational Fluid Dynamics (CFD) software is pushing the boundaries of technology in sport thus grabbing that extra millimetre or millisecond in performance enhancement.

BIOGRAPHY: Dr. Keith Hanna holds degrees in Engineering from the University of Birmingham in the UK and has been involved with industrial CFD since 1989, first at British Steel, then at both Fluent Europe Ltd. and Fluent Inc, in technical, managerial and marketing positions. Currently, Director of Marketing Communications at Fluent Inc. he retains an abiding interest in popularising CFD to the general public, and in its application to the Sports & Leisure Industry in particular. Having been actively involved with Formula 1 motor racing aerodynamics in the early 1990s, he has since gone on to help explain the mysteries of “bending a ball” at a soccer free kick, posture and technique in certain Olympic sports, and designing Americas Cup yachts. He has the distinction of being the first person to simulate air flows over a complete Formula 1 Race Car using viscous CFD techniques in 1996. Currently he sits on the Steering Group for “SportsPulse”, a unique consortium of public, commercial and academic groups aimed at growing part of the UK Sports Sector through technical research, development & innovation activities. He has been instrumental in promoting the use of CFD in various sports around the world helping to enhance elite athlete performance and is a regular Keynote Speaker at international Sports Engineering Conferences.

Six Times Olympic Gold Medalist Michael Phelps in a Speedo Fastskin FSII Swimsuit with CFD Contours of shear stress (Courtesy of Speedo Intl)



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