Editorial

The 8th Australasian Conference on Mathematics and Computers in Sport, 3-5 July 2006, Queensland, Australia

MATHEMATICS AND COMPUTERS IN SPORT - OVERVIEW

The first 17 papers in this (December) issue of the Journal of Sports Science and Medicine are selected papers from the Eighth Australasian Conference on Mathematics and Computers in Sport, held in Queensland in July 2006. Of the first seven conferences, five were held at Bond University in Queensland, one at the University of Technology in Sydney during the year of the Sydney Olympics, and the last one was in New Zealand at Massey University. The emerging discipline of mathematics and computers in sport has developed under the auspices of the Australian and New Zealand Industrial and Applied Mathematics (ANZIAM) Division of the Australian Mathematics Society through an interest group known as *MathSport*, bringing together sports scientists who are interested in

- mathematical and statistical modelling in sport,
- the use of computers in sport,
- the application of these to improve coaching and individual performance, and
- teaching that combines mathematics, computers and sport.

This eighth conference in the series returned to Queensland but not at Bond University, because campus accommodation for conference participants was no longer available at that venue. Instead delegates gathered at the Greenmount Beach Resort, which has been used during the past decade for a number of Applied Mathematics Conferences. There were 33 papers presented during the 3 days, across topics that covered a variety of individual and team sports. Participants attended from the United Kingdom, France, Germany, India, New Zealand and Australia. These participants were drawn from those working in mainstream mathematics, statistics, computers science, sports science support, coaching and education.

Professor Steve Clarke and Emeritus Professor Neville de Mestre have been to all eight conferences and this year delivered papers on Australian rules football and golf putting respectively. Tony Lewis, of the Duckworth-Lewis formula for determining the winner in rain-affected international cricket matches, has been a regular attendee since 1996 and once again presented his latest views on fairer scoring systems in cricket. It was also great to see Professor John Norman from Sheffield University appear again, as he was at the first conference in 1992, and he presented his work on Naismith's rule as it applies to competitive mountain trekking.

The *MathSport* community appreciated His Worship the Gold Coast Mayor and former world record holder over middle distances, Ron Clarke, for giving up some of his valuable time to officially open the conference. His opening remarks both inspired the audience and put the science of sport into a practical context through him relating his experiences in athletics. In addition, we were fortunate to have two prominent sports scientists as keynote speakers in Roger Bartlett (Professor of Sports Science at the University of Otago) and Dr Stuart Morgan (Sports Scientist - Victorian Institute of Sport) who delivered their keynote addresses "Artificial Intelligence in Sports Biomechanics: New dawn or false hope?" and "Synergy in Sport: directions, convergence and opportunity in high performance sport".

The first 17 papers in this issue provide an array of topics that typified the broad range of presentations at the conference. These include papers covering research methodologies that span across mathematical modelling and real-time computer analysis of movement through to biomechanical and performance analysis. These analyses were applied to a variety of sports such as football, tennis, cricket and swimming through to lawn bowls and gymnastics.

The editors are grateful for the assistance given by the reviewers of these papers, particularly

Dr Keith Lyons (Australian Institute of Sport) and Associate Professor Hugh Morton (Massey University), who were independent of the conference participants.

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Editors of Mathematics and Computers in Sports' Articles

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