



Statistical Society of Australia Inc.

Victoria Branch Newsletter: April 2006

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1) April Meeting

The next meeting of the Victorian Branch will be held one week later than usual at 6:15 p.m. on Tuesday 2nd May at the University of Melbourne, Parkville Campus. The venue is the AMSI seminar room, ICT Building, 111 Barry Street, Carlton. The Parkville Main Campus map is available at:

<http://www.pb.unimelb.edu.au/propertyandbuildings/whereis.php3?subcat=8>.

The meeting will be preceded by light refreshments at 5:45 p.m. Members and guests are invited to join the speaker for dinner at a nearby restaurant after the meeting. The speaker is:

Professor Richard Huggins
Department of Mathematics and Statistics
University of Melbourne

Topic

Nonparametric methods in ecological research.

Abstract

Nonparametric methods have several applications in estimating animal abundance. The most obvious is in estimating the size of an open population where the population size is an unknown function of time. The second is in a closed population where the capture probability of an individual is an unknown function of individual covariates such as age or weight. In this talk we shall examine the application of nonparametric and semiparametric methods to real data from open and closed populations.

2) 2006 VIC Branch Council

At the AGM on March 21, the following members were elected to the branch council for 2006:

Tristan Barnett
Kym Butler
Ian Clark
Derchieh Hung
Geoff Laslett
Ann Maharaj
Debra Partington

Mervyn Silvapulle was elected Vice President for 2006 and President for 2007-2008. The members of the executive committee are:

President:	Brian Phillips
Vice President:	Mervyn Silvapulle
Secretary:	Ann Maharaj
Treasurer:	Geoff Laslett

3) March Meeting: Talk Summary



Betting on Statistics Beating (and joining) the bookies using statistical modeling

The speaker at the March meeting, at which the AGM was held, was Professor Stephen Clarke, from the Swinburne University of Technology Sports Statistics group. His interesting talk discussed the applications of statistical modeling to exploit inefficiencies in betting markets (academic language for making a profit out of gambling).

Stephen began the presentation by showing a video of one his PhD students speaking on 'Today Tonight' about using statistics to predict the winner of the Melbourne Cup. Stephen then explained how important sport is to business and the economy, with the AFL rights worth \$780 million.

The speaker explained that betting in Australia was traditionally limited to horses and dog racing. However the growth in sports betting has seen opportunities for betting on a range of other sports. The 'head to head' nature of most sporting contests means the bookmaker's percentage is necessarily much lower than is usual in racing, opening the door to profitable betting. Swinburne Sports Statistics has been involved in forecasting match outcomes for over 20 years. The last few years has seen its predictions profitably applied to betting markets. Stephen gave examples of how he and some of his research students have beaten the "bookies" in Australian rules football, rugby and cricket.

The second part of Stephen's talk discussed how to profit from gambling by actually becoming a bookmaker. Betting on events within a sporting contest (such as the number of runs in each over of cricket) allows an increase in both the bookmaker's percentage and the number of available bets. But the short time interval for posting prices does not allow them to be set by traditional bookmakers. Through a spin-off company, he told how the Swinburne Sports Statistics group have developed models in tennis and cricket that provide prices to the bookmakers for 'betting in running'.

In conclusion, Stephen demonstrated that statistical models can be used to successfully predict sporting events. The probabilities generated by these models can be used to exploit inefficiencies in sports betting markets. Statistical models can also be used to generate prices in circumstances where traditional price setting mechanisms are not appropriate.

Swinburne Sports Statistics predictions are available online at www.swin.edu.au/sport.

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