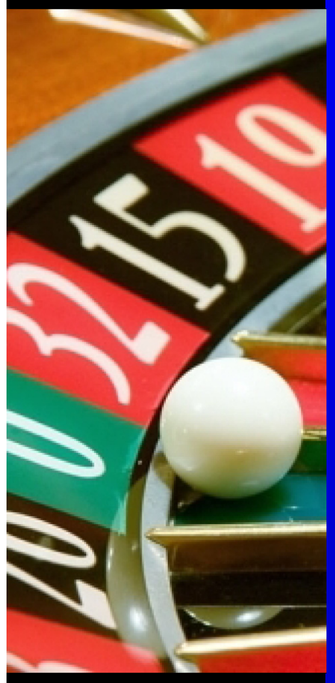
23 February 2012
(Thursday)

Lecture Theatre 26

National University
of Singapore



**Register by
17 February 2012!**

Seats are limited

Pre-registration is required

For queries, email
events@math.nus.edu.sg

A Practitioner's Insight of Gaming Mathematics

Organized by

NUS National University of Singapore | Department of Mathematics, Faculty of Science

08:30am	Registration
09:00am	Welcome Address *Prof Chong Chi Tat* *Head, Department of Mathematics, NUS*
09:05am	Opening Address *Prof Lee Kwok Cheong* *Chairman, CRA Technology Advisory Committee (TAC)*
09:15am	"Mathematical Designs & Modelling of Successful Casino Table Games" *Mr Todd Haushalter* *Vice President, Business Strategy, Shuffle Master, Inc.*
10:15am	Break
10:45am	"The Mathematical Approach to Fair Casino Gaming" *Mr David Scambler* *Vice President, Mathematics, BMM Compliance*
11:45am	Panel Discussion *Panellists:* *Mr Ee Kiam Keong, CIO/Director, Gaming Technology & ICT Systems, CRA* *Prof Lee Kwok Cheong, Chairman, CRA TAC* *Mr Todd Haushalter, Vice President, Business Strategy, Shuffle Master, Inc.* *Mr David Scambler, Vice President, Mathematics, BMM Compliance*
12:15pm	Presentation of Tokens of Appreciation *Prof Andrew Wee, Dean, Faculty of Science, NUS*
12:25pm	Closing Remark *Mr Lau Peet Meng, Chief Executive, CRA*

Register online @
http://137.132.69.246/sciitu/forum2012/registration.aspx

A Practitioner's Insight of Gaming Mathematics

Mathematical Designs & Modelling of Successful Casino Table Games

In this presentation, the speaker will share his observations from evaluating hundreds of new games and visiting casinos around the world. The speaker will explore the mathematical profiles of successful table games, and why certain game works in some parts of the world but not others.

Topics covered will include how players can use math to cheat the casinos by "counting cards", "wheel clocking" or "hole carding" and the casinos' countermeasures to such behaviour, why some games have incredibly high house advantages, while others are less than one percent and when players will tolerate a large house advantage and also some of the major flaws game inventors make in developing the math of new games.

About the speaker

Todd Haushalter is the Vice President, Business Strategy, Shuffle Master, Inc., responsible for identification and management of strategic partnerships, integration of acquisition targets, development of new-product ideas, and ensuring Shuffle Master remains on the cutting edge of the gaming industry. Todd earned a Bachelor of Science in finance from California State University, Long Beach. He earned both a Master of Science in Hospitality Management and a Master of Business Administration (MBA) from University of Nevada, Las Vegas. Todd has provided on-site assistance to casinos and gaming businesses on five continents and is a regular speaker at casinos and universities throughout the world. His experience in casino finance, casino marketing, and casino operations allows him to share with audiences the complex process of converting qualitative and quantitative data into institutional profitability.

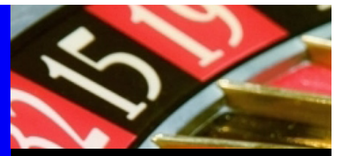
The Mathematical Approach to Fair Casino Gaming

In this presentation, the speaker will discuss a testing laboratory's role in ensuring that games and systems in casinos and other authorized venues are fair to players and other stakeholders. In particular the role of mathematics in testing and auditing will be emphasized.

Topics covered will include the definition of fairness, monitoring and audit, the house edge, return to player and volatility, traditional games electronic games and wheels, shuffling techniques, random number generators, betting systems and the risk of ruin, strategies and advantage play.

About the speaker

David Scambler is the Vice President for Mathematics at BMM with 30 years of experience in the IT industry . He has degrees in engineering and business administration and currently applies his expertise to the mathematics of slot machines and table games, the analysis of random number generators, and the evaluation of software applications and hardware systems. Apart from 10 years of experience in Gaming and Wagering mathematics, David has performed quantitative analyses in other industry sectors including retail, mining and healthcare.



Synopsis

Todd Haushalter
Vice President,
Business Strategy,
Shuffle Master, Inc.

David Scambler
Vice President,
Mathematics,
BMM Compliance