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HACKING ALERT



Cyber risks – Threats and Opportunities for the Asia Pacific Insurance Industry



CONFERENCE BROCHURE



26th – 27th July 2018



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Introducing the Speakers

Dr Marie Kratz



Dr. Marie Kratz is Professor at ESSEC Business School and Director of its risk research center, CREAR, and, since July 2017, holds a position of visiting professor at Lund University, School of Economics and Management, Sweden. She is a Fellow (Actuaire Agrégée) of 'Institut des Actuaire' (French Institute of Actuaries). She holds a Doctorate in Applied Mathematics (UPMC-Paris 6; carried out to a great extent at the Center for Stochastic Processes at Chapel Hill, North Carolina) & Habilitation (HDR), and did a post-doc at Cornell University. Her research addresses a broad range of topics in probability, statistics and actuarial mathematics, with a focus on extreme value theory, risk analysis & management, and the study of random excursion sets. These fields find natural applications in Finance and Actuarial Science that she is developing at ESSEC.

Tommy Tan



Tommy Tan works in the technology risk and payment department within MAS. He heads the technology risk supervision division, which provides the technology risk expertise necessary for MAS' supervisory and regulatory functions, and the assessment of individual institutions and system-wide risks. The team also monitors technology and cyber risk developments and trends in the sector.

Dr. Nir Kshetri



Dr. Nir Kshetri is Professor at University of North Carolina-Greensboro and a research fellow at Kobe University. He holds a Ph D in Business Administration from University of Rhode Island. He has authored eight books. His 2014 book, *Global Entrepreneurship: Environment and Strategy* (Routledge: New York) has been selected as an Outstanding Academic Title by Choice Magazine. He has published about 120 articles in various journals. Nir worked as a consultant for the Asian Development Bank during 2017-2018. He also participated as lead discussant at the Peer Review meeting of the UN's Information Economy Report 2013 and 2015.

Jessica So



Jessica So is a Senior Vice President in Marsh and leads the Marsh Risk Analytics team in Asia, based in Singapore. The team is responsible for providing analytics-based risk retention and transfer advice to clients in Asia. She is an Associate of the Institute and Faculty of Actuaries, UK. Jessica has 18 years of insurance analytics experience in both direct and reinsurance sectors. Her experience includes quantitative loss forecasting and risk modelling, cost of risk analysis for insurable risks, risk retention/transfer programme design, captive and ART feasibility studies, actuarial loss reserving, and premium allocation modelling. She has also acted as signing actuary for captives in Bermuda, Micronesia and Singapore.



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Keri Lee



Keri Lee is a Vice President in the Asia Marsh Risk Analytics team. She is a Fellow of the Institute of Actuaries of Australia and Singapore Actuarial Society. Keri has a general insurance consulting background, previously having worked at EY Singapore and PwC Australia. Keri has broad experience in M&A due diligence and bancassurance assignments across South East Asia, statutory actuarial engagements (pricing, reserving, Financial Condition Reporting) across Asia Pacific, and ERM / ORSA.

Florian Pons



Florian Pons is an IT Engineer specialized in cyber security graduated in 2009. He works most of his career in insurance industry. He is a certified actuary member from the Institut des Actuaire after submitting a memory on Actuarial Study of Cyber Risks (in French) in 2014. Since then he is an active member of the working groups of the French Institut des Actuaire on Data Science and Cyber Risks.

**Maria Elizabeth
De Guzman**



Maez Elizabeth is currently heading the cybersecurity practice of EY's Philippine Global Delivery Services. She has vast experience in the financial services sector working on security transformations, technical risk assessments, security operations, threat intelligence and incident definitions & measurements. She is experienced across multiple layers of Managed SOC services, from client leadership engagement, technology and architecture design/integration to standard operations and processes. Maez had a wide global work involvement across APAC with extensive offsite service delivery experience in the Americas region. She is the Program Director and lead security architect on a number of significant Security Automation, Orchestration and Response (SOAR) platform implementations.

Clarence Wong



Clarence Wong is the Chief Economist for Swiss Re in Asia. He is also the Asia Regional Head of Swiss Re Institute. He leads a team of researchers based in Hong Kong, Beijing and Bangalore to provide Swiss Re and other stakeholders with economic and insurance insights, as well as research on emerging risk landscape in Asia. At the same time, his team contributes to Swiss Re's sigma, the regular insurance industry report that is considered a "must-read" for anyone interested in the sector.

Clarence joined Swiss Re in early 1999 as a senior economist in the former Economic Research and Consulting department. Prior to that, he spent nine years at HSBC's economic research department. Previously, he worked with Price Waterhouse in its management consulting arm, and in the R&D department of Hutchison Trading Ltd. Clarence has a Master degree in Economics from the University of Hong Kong.



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Meiyang Guo



Meiyang Guo graduated from Columbia University in the City of New York with a Master Degree in Actuarial Science. She also holds MBA from Singapore Management University. She started her career doing actuarial valuation with Reinsurance Group of America. She joined Synpulse Management Consulting at beginning of 2017, Meiyang is now the in-house topic expert of emerging risk. Her consulting experience includes digital transformation of insurers, strategic action planning and Agile Implementation of IT solution. She just received her recognition of Associate of the Society of Actuaries (ASA) in June 2018. Meiyang was art director for self-started fashion brand called May Zuri. Her book, “A mouthful of love”, about food and relationship, was published in China in 2016.

Julien Parasie



Julien Parasie is the Head of Capital Management for SCOR Asia Pacific, in charge of allocating the Group Capital within the region. He has more than 16 years of experience in the insurance industry, including 8 years in Asia. He combines actuarial, accounting and risk management backgrounds. Before joining SCOR in 2015, Julien spent 12 years in an audit & consulting firm, servicing insurance clients in Europe and in Asia in the areas of internal & statutory audits, risk management & governance, actuarial reviews, M&A, people development consulting, etc.

Jessica Wright



Jessica Wright began her career as a liability broker in New Zealand. She most recently held the position of New Zealand Cyber Risk Practice Lead for Marsh before joining to Willis Towers Watson in Singapore in July 2017. Jessica worked closely with the New Zealand government and other key stakeholders including legal, IT security and consulting to develop cyber-risk awareness in the New Zealand market, and was responsible for Marsh’s overall cyber strategy, overseeing cyber insurance and risk management solutions. Jessica has presented on cyber risk at a number of key industry events, including the New Zealand Law Society Cyber Law Conference, the In-House Lawyers Association of New Zealand Cyber Risk Conference, and the PARIMA Risk Conference in Bangkok 2018.

Radhey Shyam



Radhey Shyam is the Director and Chief Operating Officer (IT) for AIG APAC Holdings Pte. Ltd. He has over 25 years of IT management experience, with strong exposure in managing people, technologies & IT business operations. In his current position, Radhey oversees IT Strategy, IT finance & investment management, IT services & solutions delivery and IT governance covering policy management, technology standards, security and broader risk management in support of APAC region. Radhey holds a Master’s Degree in Business from Curtin University, Australia and a Degree in Commerce and Accounting from University of Madras, India.



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Raymond Cheung



Raymond Cheung is the Chief Strategy Officer of Symbo Platform Holdings where he advises the group on InsurTech business model, regulatory landscape, operational roadmap and execution plans in SEA. He brings over 17 years of general insurance experience. He has worked in consulting firm, direct insurance, reinsurance, rating agency, financial advisory firm and technology startup companies. His specialty includes business strategy with technology solutions, actuarial pricing & reserving, capital modeling, product development, merger & acquisition, credit ratings, Enterprise Risk Management (ERM), Risk-Based Capital and compliance advisory. Raymond is also the founder of BRCA Consultancy where he provides advisory and trainings for financial institutions in ERM, actuarial, RBC framework and corporate governance in Asia. He also acts as the adviser for 5 technology startups in Singapore, Hong Kong, Indonesia and Myanmar.

Dr. Michel Dacorogna



Mr Michel Dacorogna, is partner at Prime Re Solutions, a company advising financial institutions on actuarial and economic matters. He is also Director of Risk Management at the Geneva Association and head of DEAR-Consulting. He is the former scientific advisor to the chairman of SCOR. He conducts research in the field of insurance mathematics, capital management and risks. He presents models and capital management techniques to management and customers. He is Member of the board of the Research Center on Insurance Risk at the Nanyang Technical University of Singapore, he collaborates with the center on their various initiatives. Until July 2013, Michel was deputy group CRO of SCOR in charge of Solvency II and the internal model. He was at the origin of SCOR's internal model, which he developed with his team for more than 10 years.

Author and co-author of more than 85 publications in refereed scientific journals; he is often invited to present his results in international conferences and specialized seminars. His work is referenced in many publications. One of the papers he co-authored was the most quoted paper over 5 years in the Journal of Banking and Finance. His book: "An Introduction to High Frequency Finance" remains a reference in the field. He also lectures at the ETH and University of Zurich, at the University Ca'Foscari in Venice (Italy) and at the University of Turin (Italy) in their Master of Finance and insurance programs. He has been awarded the International Research Chair LabEx MME-DII & ESSEC CREAR in 2018 at ESSEC Business School in Paris.

He received his Habilitation, Ph. D. and M. Sc. in Theoretical Physics from the University of Geneva in Switzerland and did a post-doc at the University of California in Berkeley.



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Introducing the Speakers

Dr. Kai-Lung Hui



Dr. Kai-Lung Hui is a Chair Professor in the Department of Information Systems, Business Statistics, and Operations Management at the Hong Kong University of Science and Technology. His research interests include cybersecurity, privacy, IT policy, Fintech, and electronic commerce. Dr. Hui has provided expert advice and consulting services on copyright and digital piracy to various government and non-government organizations including the Intellectual Property Department of the Hong Kong SAR Government, World Intellectual Property Organization, and Ministry of Law of Singapore. He frequently speaks in conferences and forums on digital piracy, cybersecurity and privacy, Fintech, and technology policy. Dr. Hui has taught undergraduate, MSc, MBA, EMBA, PhD, and executive courses on cybersecurity and risk management, privacy management, Fintech, blockchain and cryptocurrencies, economics of IT, strategic IT management, and business strategy, among others.

Dr. Mark Bentley



Dr Mark Bentley has been working for Data61, a subsection of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Australia's leading data innovation group, since June 2017. He completed his PhD at Monash University in January 2018 on the topic of Credit Valuation Adjustments for Credit Default Swaps. At Data61, he is a part of Risklab Australia which has expertise in Stochastic Optimisation and Foreign Exchange Derivatives pricing. Here he has been working on the quantitative modelling of cybersecurity risk and stochastic supply chain optimisation.

Dr. Nona Pepito



Dr. Nona Pepito teaches economics in the Master in Management, Master in Finance, Executive MBA, and Global MBA programs in ESSEC Business School, where she is an Assistant Professor of Economics. She is an applied microeconomic and game theorist who has done research on transparency and incentive issues within joint projects. Her work has appeared in the international peer-reviewed journals *International Economic Review*, *Journal of Public Economics*, and *Economics Letters*. Her current research interest includes the incentive effects of information disclosure in teams and the strategic considerations in attacker-defender games and in maritime disputes in the South China Sea.

Ram Garg



Ram Garg is an Insurance and Reinsurance professional with a special focus on Specialty line such as D&O, Casualty, Cyber. He travels across the Asia region for business development and runs financial & casualty division out of Singapore. He is an experienced leader in specialty risk solution, as well as a mentor and experienced trainer. Ram regularly conducts seminars and workshops for clients on new products, underwriting, financial and casualty claim trends and marketing.



Introducing the Speakers

Sie Liang Lau



Sie Liang Lau is Senior Underwriter of UK Market, looking after long tail lines business as well as other initiatives including cyber, InsurTech and capital solutions. Sie Liang has over 18 years of diverse experience which include business planning, financial reporting, capital management, product development and pricing, actuarial valuations and process reviews and merger and acquisition/management buyout due diligence. His projects spanned many countries including UK and within the Asia Pacific region including Hong Kong, India, South Korea, Malaysia and Singapore. Prior to joining SCOR UK, Sie Liang held various positions as the Appointed Actuary at a Lloyd's Syndicate in London and Chief Actuary for SCOR, the Global Reinsurer for Singapore operations.

**Srinivas
Bhoosarapu**



Srinivas Bhoosarapu has over 18 years of working experience in the IT field. He provides IT Consulting services in Insurance Regulatory and Development Authority of India (IRDAI) and Techno Functional expert solutions in various organisations such as IRDAI, Andhra Pradesh Civil Supplies Corporation, Stree Nidhi Cooperative Bank (Govt of Andhra Pradesh), National Payments Corporation of India (NPCI) and Genpact India. He conducts regular advisory, trainings, seminars and workshops as a speaker in conferences and forums on various topics BFSI, Smart city security, IoT, Digital India, digital piracy, National cyber security Policy (NISP 2013), IPV6, Block Chain in Fintech, technology policy, Cyber Risk Awareness and Financial regulatory Compliance.

SAS ERM - ESSEC CREAR Conference 2018



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Registration Details

Date : 26th – 27th July 2018
Venue : ESSEC Asia-Pacific Campus
Level 1 Amphitheatre
2 One-North Gateway
Singapore 138502



By Train

ESSEC Asia-Pacific Campus is located at the corner of One-North Gateway and North Buona Vista Road. The nearest MRT stations are Circle Line: One-North Station (CC23) and Buona Vista Station (EW21/CC22). Available buses are: 74, 91, 92, 191, 196, 198, 200.



By Car or Taxi

Travel by AYE and turn off at Exit 8 to South Buona Vista Road. Turn right to North Buona Vista Road, keep right and turn right into Portsdown Road. Turn left into Nepal Park to reach the campus, located at the end of the road.

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Registration Fees

| Category | | Early Bird Registration (Payment by 18/07/2018) | Standard Registration (Valid from 19/07/2018 to 25/07/2018) |
|----------------|-------------------------------------|--|---|
| SAS Member | Fellow/Associate/Ordinary/Affiliate | SGD 600 | SGD 700 |
| | Student & Academic | SGD 25 | SGD 25 |
| SAS Non-Member | | SGD 700 | SGD 800 |

The registration fee includes attendance to all sessions. If two colleagues from the same firm wish to attend on different days, the higher registration fee plus an administration fee of SGD 50 is payable. Please register the first person online and email the name, SAS ID (if applicable) and email address for the second person to Ms Patsy Lau at patsy@actuaries.org.sg.

Full registration fees must be paid before the valid dates for conference admittance and to receive the early bird discount. Payment can be made via PayPal (subject to additional administrative fee of 4.25%), Bank Transfer, Local Cheque or Cash. Please note that all Bank/PayPal administrative and commission charges will be borne by the delegates.

Registration Process

Please register for this conference on the SAS website at www.actuaries.org.sg and complete the "Sign Up" details. As part of the registration process, please indicate which sessions and meals you are planning on attending. For SAS members, please login on the SAS website for the event registration. For any queries on the registration process, please contact Ms Patsy Lau at patsy@actuaries.org.sg.

Cancellation Policy

All cancellations should be made by sending an email to Ms Patsy Lau at patsy@actuaries.org.sg. An acknowledgement of the cancellation will be emailed to you. For cancellations made by the 18/07/2018, 50% of the conference fees will be refunded to you (less any bank administrative and commission charges). No refunds will be made for cancellations thereafter. The SAS reserves the right to cancel the conference if conditions warrant. In the event of such cancellation, registration fees will be refunded in full. We are not responsible for any airfares or hotel penalties that a delegate may incur due to such cancellation.

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Continuing Professional Development (“CPD”)

This event can count towards CPD.

Attire

Business casual attire is recommended for this conference.

Financial Training Scheme (“FTS”) Eligibility

This programme is recognized under the FTS and is eligible for FTS claims subject to all eligibility criteria being met.

Please note that **in no way** does this represent an endorsement of the quality of the training provider and programme. Participants are advised to assess the suitability of the programme and its relevance to participants’ business activities or job roles.

The FTS is available to eligible entities based on the prevalent funding eligibility, quantum and caps. FTS claims may only be made for recognized programmes with specified validity period. Please refer to www.ibf.org.sg for more information.

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DAY ONE – 26th July 2018

| Time | Item | Speaker | Company | Topic |
|-------|---|---|--|---|
| 8:30 | Registration & Welcome Coffee | | | |
| 9:00 | | Dr. Marie Kratz | ESSEC Business School | Opening Address |
| 9:10 | Session 1A | Tommy Tan | Monetary Authority of Singapore | Keynote Address |
| 9:40 | Session 1B | Dr. Nir Kshetri | The University of North Carolina | Keynote Address: Can Blockchain Improve Cybersecurity? |
| 10:20 | Session 1 Q&A (Moderator: Dr Marie Kratz) | | | |
| 10:40 | Morning Break | | | |
| 11:00 | Session 2A | Jessica So, Keri Lee | Asia Marsh Risk Analytics | Cyber Risk Management Response and Recovery: Global Governance Insights |
| 11:30 | Session 2B | Florian Pons | The French Institut des Actuaaires | Cyber Risks & Big Data: From data breach to algorithms |
| 12:00 | Session 2 Q&A (Moderator: Dr Marie Kratz) | | | |
| 12.20 | Lunch | | | |
| 14:00 | Session 3A | Maria Elizabeth De Guzman | Ernst & Young | Cyber Risk Automation and Orchestration |
| 14:30 | Session 3B | Clarence Wong, Meiyang Guo | Swiss Re, Synpulse Management Consulting | Maturity Analysis for Emerging Risk—Using Cyber Risk as An Example |
| 15:00 | Session 3 Q&A (Moderator: Julien Parasio) | | | |
| 15:20 | Afternoon Break | | | |
| 15:40 | Session 4A | Jessica Wright | Willis Towers Watson | Rising Risks of Cyber Threats |
| 16:10 | Session 4B | Radhey Shyam | AIG | Cyber Risk Management & Oversight through Effective IT Governance |
| 16:40 | Session 4 Q&A (Moderator: Julien Parasio) | | | |
| 17:00 | Session 5 | Panel Discussion: How Insurance Industries, Academics and Regulators can join hands to counter cyber threats in Singapore (Moderator: Julien Parasio) | | |
| 18:00 | Wrap Up | | | |
| 18:30 | Cocktail & Dinner at Da Paolo | | | |
| 22:00 | End of Day 1 | | | |

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DAY TWO – 27th July 2018

| Time | Item | Speaker | Company | Topic |
|-------|---|-------------------------------------|--|--|
| 8:30 | Registration & Welcome Coffee | | | |
| 9:00 | | Raymond Cheung | Singapore Actuarial Society | Opening Address |
| 9:10 | Session 6A | Dr. Michel Dacorogna | Prime Re Solutions (Zurich) | Keynote Address: Are Cyber Risks Insurable? |
| 9:50 | Session 6B | Dr. Kai-Lung Hui | Hong Kong University of Science and Technology | Keynote Address: Cybersecurity: Challenges and Recent Developments |
| 10:30 | Session 6 Q&A (Moderator: Raymond Cheung) | | | |
| 10:50 | Morning Break | | | |
| 11:10 | Session 7A | Dr. Mark Bentley | Risklab at Data61 | Optimisation of Mitigations in a Multivariate Cyber Risk Model |
| 11:40 | Session 7B | Dr. Nona Pepito | ESSEC Business School, National University of Singapore | Paradox of Terror Spending |
| 12:10 | Session 7 Q&A (Moderator: Raymond Cheung) | | | |
| 12:30 | Lunch | | | |
| 14:10 | Session 8A | Ram Garg | J B Boda & Co | Market & Demand Dynamics of Cyber Insurance Products |
| 14:40 | Session 8B | Sie Liang Lau | SCOR UK | Making sense of Cyber Risk |
| 15:10 | Session 8 Q&A (Moderator: Monami Mukherjee) | | | |
| 15:30 | Afternoon Break | | | |
| 15:50 | Session 9 | Srinivas Bhoosarapu, Raymond Cheung | Insurance Regulatory & Development Authority of India SAS | Cyber Risk Workshop: Insurance Cyber Risks Regulations and Development of Mitigating Solutions |
| 17:50 | | Dr. Marie Kratz | ESSEC Business School | Closing Address |
| 18:00 | End of Day 2 | | | |

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