2018 SEMINAR ON REINSURANCE

JUNE 4-5, 2018

NEW YORK MARRIOTT AT THE BROOKLYN BRIDGE BROOKLYN, NY

CASUALTY ACTUARIES IN REINSURANCE 30TH ANNUAL MEETING

Casualty Actuaries in Reinsurance, or CARe, was founded in 1988 by a group of reinsurance actuaries who saw the need for a forum to discuss their common practical issues and to foster reinsurance research and education. CARe was later organized as a special interest section of the CAS.

The purpose of this seminar is to provide information on a variety of reinsurance topics. Practical approaches to problems will be presented and discussion will be encouraged. Participants can expect to gain awareness and insight into difficult issues and are encouraged to share their own ideas.

JOINT PROGRAM COMMITTEE FOR REINSURANCE SEMINARS

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TWEET FROM THE 2018 SEMINAR ON REINSURANCE!

What's happening at the 2018 Seminar on Reinsurance? We want to hear from you! Tweet about the seminar's educational sessions and meeting events using the hashtag #CASCARE18.



FOLLOW THE CAS ON TWITTER @CASACT

Not using Twitter yet? Text "CASact" to 40404 to Follow the CAS on Twitter And Follow the Prompts to Sign Up!

SOCIAL MEDIA

The CAS is on Facebook, Twitter and LinkedIn! Stay informed by following CAS on Facebook and Twitter for exclusive updates on CAS activities! The CAS Facebook and Twitter page will feature many different topics including conference updates, online discussions and industry updates! Join and connect with peers and colleagues and discuss issues important to you!

If you cannot access Facebook, Twitter and LinkedIn from your office, please consider signing up to follow us from your personal account at home.

Please visit our website at www.casact.org and click the social media widgets to find our pages!







DOWNLOAD THE CAS MEETING APP

We're excited to announce that again this year, the Casualty Actuarial Society has worked with Gather Digital to provide a mobile application for the event. You will get up-to-the-minute information such as the latest agenda, updates from the conference planner, speaker information, feedback opportunities, maps, exhibitor and sponsor details, an attendee list and more.

To enable your account:

- 1. Open the app.
- 2. Select "More" or swipe right to view the menu.
- 3. Login entering the email that you used to register for the conference and select "Request a Password." An email will be sent with a link to create your personal app password.
- 4. Click on the link to create a profile and upload a photo of yourself.

To edit your profile later, log into the app and select your email address at the top of the menu. This takes you to the "My Account" screen where you can edit your profile and upload a photo.

To get the meeting mobile app:

iPhone and iPad users — search "casualty actuarial society" on the Apple App Store.

Android users - search "casualty actuarial society" on the Google Play Store.

Blackberry, Windows, **others** — go to the URL cas.gatherdigital.com on your smart phones (omit www). cas.gatherdigital.com



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CONTINUING EDUCATION

The CAS Continuing Education Policy applies to all ACAS and FCAS members who provide actuarial services. Actuarial services are defined in the CAS Code of Professional Conduct as "professional services provided to a Principal by an individual acting in the capacity of an actuary. Such services include the rendering of advice, recommendations, findings, or opinions based upon actuarial considerations."

Members who are or could be subject to the continuing education requirements of a national actuarial organization can meet the requirements of the CAS Continuing Education Policy by satisfying the continuing education requirements established by a national actuarial organization recognized by the Policy.

This activity may qualify for up to 13.5* CE Credits for the Seminar on Reinsurance for CAS members. Insurance-Linked Securities (ILS) Workshop attendees may add up to a maximum of 3* CE credits. Participants should claim credit commensurate with the extent of their participation in the activity. CAS members earn 1 CE Credit per 50 minutes of educational session time not to include breaks or lunch.

*The amount of CE credit that can be earned for participating in this activity must be assessed by the individual attendee. It also may be different for individuals who are subject to the requirements of organizations other than the American Academy of Actuaries.

REGISTRATION HOURS

The Seminar on Reinsurance registration desk will be open as follows:

Sunday, June 3, 2018, 4:00 p.m. – 6:00 p.m.

Monday, June 4, 2018, 8:00 a.m. - 6:00 p.m.

Tuesday, June 5, 2018, 7:00 a.m. – 2:00 p.m.

RECOMMENDED ATTIRE

Business casual attire is suggested for all sessions as well as the reception on Monday evening. Since meeting room temperatures and personal comfort levels vary, it is recommended that you bring a sweater or jacket to the sessions. In New York City, the average high temperature during June is 74 degrees F and the average low is 59 degrees F.

INTERACTIVE LIVESTREAMING

During the seminar, a select few of the seminar sessions will be offered live virtually to viewers from around the globe. Participants attending remotely will have the opportunity to interact with other virtual attendees as well as pose questions to the panel during the session.

Livestream Sessions

9:00 a.m. - 10:30 a.m.

Welcome/General Session 1 — The Dueling Brokers — Pricing Edition

11:00 a.m. - 12:15 p.m.

Concurrent Session 1 — C-8: Latest Developments in U.S. Flood Modeling, Rating and Reinsurance

1:15 p.m. – 2:30 p.m.

Concurrent Session 2 — C-10: Geoscience Review

3:00 p.m. – 4:15 p.m.

Concurrent Session 3 — C-3: Bridging Insurtech and Reinsurance

4:30 p.m. – 5:45 p.m.

Concurrent Session 4 — C-20-R: The Evolution of Reinsurance Pricing in a Disrupted Environment

RECEPTION

All who attend meals must wear their meeting badge, which is included in your registration packet. Registrants may purchase additional tickets for the reception only. The ticket price is \$100 for Monday night's reception. Additional tickets for this function may be purchased at the registration desk.

Hotel Information New York Marriott at the Brooklyn Bridge 333 Adams St. Brooklyn, NY 11201

Brooklyn, NY 112 (718) 246-7000

Checkout time is 11:00 a.m. Those checking out before the conclusion of the meeting may check their bags at the bell desk of the hotel. The Casualty Actuarial Society is not responsible for lost or stolen items left unattended in public areas of the hotel. CAS staff is unable to accept any bags or other personal items at the registration desk.

Security note: When leaving the meeting room for an extended period of time, please take valuables and personal belongings with you. Neither the CAS nor the New York Marriott at the Brooklyn Bridge may be held responsible for lost or stolen items.

ADDITIONAL INFORMATION

For more information on future seminars or other CAS opportunities, contact the CAS Office at (703) 276-3100 or visit http://www.casact.org/education.

HANDOUTS AND EVALUATIONS

Session slides are posted on the CAS website so that attendees may download, print and bring handouts as desired. Please note that not every presenter will choose to provide a presentation for his or her session. Attendees are encouraged to go online or use the mobile app to view the list of attendees, complete the online evaluation forms and download presentations.

The CAS appreciates your participation in this effort to reduce the seminar's carbon footprint and impact.

CAS STUDENT PROGRAM

The Casualty Actuarial Society is pleased to offer its annual Student Program at the Seminar on Reinsurance. University students are invited to network with practicing actuaries, learn more about reinsurance and the property and casualty industry, and participate in student-specific sessions offering career guidance. The CAS hosts up to 30 university students for complimentary one-day programs at five CAS events annually. The goal is to strengthen the partnership between practicing actuaries and the actuarial academic community because it is vital to the long-term success of the actuarial profession.

Speakers: Daniel Fernandez, Business Actuary, Navigators Re

Caitlyn Lia, Vice President, Swiss Re America Holding Corporation

Lon Chang, EY

INSURANCE-LINKED SECURITIES (ILS) WORKSHOP

Pre-registration is required for this workshop

Tuesday, June 5, 2:30 p.m. - 5:15p.m., Sunset Park

The Insurance-Linked Securities (ILS) Workshop will focus on the ILS and alternative capital market. The workshop will provide attendees with a networking and education opportunity that explores the key issues, instruments, and participants in the ILS market. Market-leading experts will conduct a series of discussion panels on key market issues such as the aftermath of the 2017 hurricane season, market expansion into new instruments and perils, and the role of alternative capital' in the future of reinsurance.

Moderator/Speaker: Aaron Koch, Consulting Actuary, Milliman, Inc.

Speakers: William Dubinsky, Managing Director & Head of ILS, Willis Towers Watson

Securities

Lixin Zeng, CEO, AlphaCat Asset Managers

John Seo, Co-Founder & Managing Principal, Fermat Capital Management James Doona, Managing Director- Capital Partners, Munich Re America, Inc.

2018 SEMINAR ON REINSURANCE RATING SYSTEM

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No prior knowledge of the subject matter is assumed,

or little or no technical content.



General knowledge of the subject matter is assumed,

or moderate technical content.



General or working knowledge of the subject matter is assumed,

or moderate to highly technical content.

More detail about the session and speakers is found on the CAS Meeting App (see page 2). All sessions will be recorded, except where indicated.



Checkbox for Personal Attendance Record



Recorded Session



Livestreamed Session

GENERAL SESSIONS

■ WELCOME/GENERAL SESSION 1: THE DUELING BROKERS - PRICING EDITION ■

Monday, June 4, 9:00 a.m. - 10:30 a.m., Salon FGHI

Listen and learn what three brokers with three different perspectives have to say about 'where we are in the market today, where we have been and what we could see on the horizon.

Questions the panel will consider:

- Will we hit a hardening market or is that concept a dead duck?
- What will the next hard market look like? Will it feel like the world post-KRW or post 9/11?
- What would it take to get to a hard market?

Moderator/Speaker: Tony Baldo, The Insurance Insider

Speakers: Stephanie Rabin, Head of Corporate Strategy, Holborn Corporation

Andrew Marcell, President, Aon Benfield

James Bradshaw, CEO, Willis Re

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Tuesday, June 5, 1:00 p.m. - 2:15 p.m., Salon ABC

Three reinsurance company and fund executives will discuss reinsurance market capacity from both a U.S. and global perspective. The panel will also discuss the influences of alternative capital options.

More specifically, they will explore:

- What the capacity landscape will look like on the horizon.
- The ILS market and its breadth of exposure for the path ahead.
- The impact of recent U.S. tax law changes on appetite for capacity.
- If there are any other alternative capacity sources to look for.
- If the pension fund will play a substantial force going forward.

Moderator: Bruce Fell, Principal, Deloitte Consulting, LLP

Speakers: Michael Millette, Founder and Managing Partner, Hudson Structured Capital

Management Ltd.

Keith Wolfe, President - U.S. P&C - Regional & National, Swiss Re Rob Bredahl, President & CEO, Third Point Reinsurance (USA) Ltd.

BASIC TRACK

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Concurrent Sessions 2, Monday, June 4, 1:15 p.m. – 2:30 p.m., Salon B

If you are searching for a reinsurance boot camp, this is the right session for you. During this session we will cover important questions such as why we need reinsurance, how and why the treaty structure was set up, which information is needed to price a treaty, and how it is done.

Attendees will leave this session with answers to these and more questions. As a basic track, it will focus on traditional reinsurance treaty structures: quota share, excess of loss (per risk/per occurrence) and stop loss.

Moderator/Speaker: Joshua Fishman, Senior Vice President, Willis Towers Watson

Speaker: Sean Devlin, Team Leader - R&N Actuarial, Swiss Re

INTERMEDIATE TRACK

☐ • • I-1: OVERLOOKING TAILS •

Concurrent Sessions 4, Monday, June 4, 4:30 p.m. - 5:45 p.m., Salon C

Actuaries are faced with a multitude of decisions when either pricing contracts and establishing reserves. One of the most common decisions to make when confronted with less than fully credible data is establishing what development factors to select, then weighing those factors with a library of layered incurred and paid industry benchmarks, and, quite importantly, trying to assess the length of the "tail."

This session will use real-life examples of items typically found in an excess casualty submission, a set of industry benchmarks and lots of ingenuity — all to try to derive various pricing, reserving and aggregate distribution indications. The real" issue is that the illustrative data is 8x8, while it is expected that the actual development could go to 20+ years. Two very skilled actuaries will try to tackle the analysis in different ways: one from a classical probability approach using various transforming, scaling and duration mechanisms; the other using a Bayesian loss development credibility model. Both will attempt to build a maximum likelihood estimate that compromises between the actual and benchmark patterns when confronted with wide ranges.

At times the presenters will delve into complexities — using the Cape Cod method, Mata/Verheyen limit adjustments, heteroskedasticity measurements and loglogistic growth curves — but it is hoped that this presentation will provide the practitioner with new tools and ways of thinking for an age-old problem. We will also discuss the measuring of skill of indications from five and other years of data when tails are 20+ years, with an important concept of not being overconfident when assessing less than mature data.

Moderator/Speaker: John Buchanan, Principal - Excess & Reinsurance, ISO

Speakers: David Clark, Munich Re America, Inc.

Aleksey Popelyukhin, Vice President, Head Actuarial Data Services, Swiss Re

America

☐ 6 1-2: PROPERTY RISK EXPOSURE RATING OPTIONS •

Concurrent Sessions 7, Tuesday, June 5, 11:00 a.m. - 12:15 p.m., Salon G

This session will cover a comprehensive introduction of rating elements, standard data collection, General Insurance Research Organization (GIRO) reference paper materials and the new PSOLD smoothed component pricing basics and implementation. Comparisons of various industry first loss scales, large policy analysis, actual vs. expected layer frequency testing and International ground-up and excess pricing extensions will be covered as well.

Moderator/Speaker: Xingzhi Wu, AXIS Capital Insurance

Speakers: Steven White, Guy Carpenter & Co. LLC

Don Yahalom, ISO

ADVANCED TRACK

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Concurrent Sessions 4, Monday, June 4, 4:30 p.m. – 5:45 p.m., Salon HI Concurrent Sessions 6, Tuesday, June 5, 9:30 a.m. – 10:45 a.m., Salon C

Oh no! The pricing differential on my treaty across my reinsurers is HUGE! We all know that actuarial pricing for a reinsurance treaty is an imperfect science. We have limited data; loss development is further delayed by the retentions; historical and future portfolio shifts can change the answer; accounting for the softer items is important but difficult to incorporate. And the list goes on.

Three brave actuaries will be given the exact same underwriting submission and reinsurance structure, and they will battle it out and put reinsurance pricing to the test on a working multi-line layer.

What will be 'their loss pick? How different will the picks be? What will drive their selections? We will review how they got to their answers and compare/contrast the differences.

Moderator/Speaker: Stephanie Rabin, Head of Corporate Strategy, Holborn Corporation

Speaker: Sean Devlin, Team Leader - R&N Actuarial, Swiss Re

Chris Swan, Allied World Re Lesley Bosniack, LT Analytics

☐ 6 6 6 A-2: RISK TRANSFER 9

Concurrent Sessions 5, Tuesday, June 5, 8:00 a.m. - 9:15 a.m., Salon C

Risk transfer comes up frequently for insurance and reinsurance transactions. Conversations involving risk transfer can involve one"s auditors, regulators and rating agencies as accounting treatment of insurance transactions is often a very material consideration. The presentation will touch base on the historical development of risk transfer rules. It will also discuss more recent developments in the area such as reasonably self-evident status. The session will discuss basic tests used to show risk transfer and highlight a test case deal that loses money to the insuring entity but still does not pass risk transfer. The session will consist of traditional presentations but the hope is to spur on discussion. The most important point the session: Interpretations of risk transfer status from the appropriate guidance vary widely.

Moderator/Speaker: John Ferrara, EY

Speaker: Joseph Milicia, Willis Towers Watson

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Concurrent Sessions 7, Tuesday, June 5, 11:00 a.m. - 12:15 p.m., Salon A

As a sequel to the CARe 2017 presentation "Arbitration 101: What Every Actuary Should Know About Arbitration," a panel of distinguished actuaries and reinsurance lawyers will perform a series of mock arbitration vignettes related to a dispute over the interpretation of a structured reinsurance contract. The audience will render decisions. Topics addressed include rules of discovery, interpretation of important reinsurance contract clauses and expert testimony. Additionally, this session will help prepare you for involvement in reinsurance and insurance disputes, and help you become a better expert witness.

Content is accessible to all, regardless of attendance at the CARe 2017 session.

Moderator/Speaker: Paul Braithwaite, Senior Managing Director, Practice Co-Leader - Global

Insurance Services, FTI Consulting

Speakers: Steven Schwartz, Partner, Chaffetz Lindsey LLP

Elizabeth Sander, Executive Vice President, Chief Actuary, Odyssey

Reinsurance Company

Alysa Wakin, Vice President & Claims Counsel, Odyssey Reinsurance

Company

☐ 6-2: DEVELOPING TREATY EXPERIENCE TO ULTIMATE •

Concurrent Sessions 3, Monday, June 4, 3:00 p.m. - 4:15 p.m., Salon C

Reinsurance pricing actuaries often have to develop losses on treaty experiences where the treaty is not a standard annual losses occurring or annual risks attaching treaty. For example, how should the actuary adjust the loss development factor for a 15-month effective losses occurring treaty? Another common variant is a cut-off risks attaching treaty, which starts off as a policy year and then stops cold at the end of the first year. This is similar to a policy year, although exposures only accumulate for a year.

This session will start with a broader general insights about how exposure patterns impact loss development. The discussion will then proceed to show how to use an accident year curve and some equations to approximate development of losses for treaties with nonstandard exposures.

Moderator/Speaker: Ira Robbin, Transatlantic Reinsurance Company

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Concurrent Sessions 3, Monday, June 4, 3:00 p.m. - 4:15 p.m., Salon FG

Advancements in technology have created numerous opportunities for innovators to provide new products and solutions to the insurance market. In this session, we will discuss an innovative structure that links insurtech startups and digital distribution platforms with insurance carrier paper and reinsurance capital.

Moderator/Speaker: Julie Sherlock, Head of Insurance Strategy, Boost Insurance

Andrew Lerner, Managing Partner, IA Capital Group Kara Owens, Managing Director, Markel Corporation

Vikas Singhal, Partner, Hudson Structured Capital Management

☐ 6 C-4: CYBER LIABILITY INSURANCE — A GLOBAL VIEW 9

Concurrent Sessions 4, Monday, June 4, 4:30 p.m. - 5:45 p.m., Salon A

This panel discussion is designed to inform the audience on current trends in the cyber industry from a global point of view. It is expected to be interactive with the audience. This experienced panel will share both underwriting and pricing parameters that are essential to this fast-growing segment of the insurance industry. This panel is expected to explore potential modeling techniques as well as threat scenarios including the effect of dark web."

Moderator/Speaker: Athula Alwis, QBE North America

Speaker: Conrad Williams, Capsicum Re

☐ 6 C-5: EMERGING ISSUES 1 •

Concurrent Sessions 5, Tuesday, June 5, 8:00 a.m. - 9:15 a.m., Salon G

Emerging Issues 1 will illuminate the insurance angle on nanotechnology, artificial intelligence and autonomous vehicles.

Moderator/Speaker: Barbara Ingraham, Managing Director - Excess & Surplus, Verisk

Speakers: Gerard Finley, Senior Vice President - Casualty Treaty Underwriting, Munich

Re America, Inc.

Gerald Deneen, Swiss Re America

☐ C-6: EMERGING ISSUES 2 9

Concurrent Sessions 6, Tuesday, June 5, 9:30 a.m. - 10:45 a.m., Salon G

Emerging Issues 2 concentrates on the on the U.S. — its changing demographics and resultant issues with marijuana, opioid use and chronic disease/obesity.

Moderator/Speaker: Barbara Ingraham, Managing Director, Excess & Surplus, Verisk

Speakers: Gerard Finley, Senior Vice President - Casualty Treaty Underwriting, Munich

Re America, Inc.

Gerald Deneen, Swiss Re America

☐ 6-7: LIGHTS! CAMERA! PROFESSIONALISM!

Concurrent Sessions 1, Monday, June 4, 11:00 a.m. – 12:15 p.m., Salon A Concurrent Sessions 6, Tuesday, June 5, 9:30 a.m. – 10:45 a.m., Salon F

Come enjoy the acting of some fine fellow actuaries who will perform several skits involving professional dilemmas! These new skits for 2018 will lead to some lively audience discussions. You will walk away from this session with a better understanding of the ASOPs, codes of conduct and how to apply them when you face your own professional ethical dilemmas.

This session may provide attendees with Professionalism Continuing Education credits.

Moderator/Speaker: Peter Royek, Senior Vice President & Actuary, Toa Reinsurance Company of

America

Speakers: Zilan Shen, Guy Carpenter & Co. LLC

Daniel Jaeger, Validus Holdings, Ltd. George Levine, Director, KPMG, LLP

C-8: LATEST DEVELOPMENTS IN U.S. FLOOD MODELING, RATING AND REINSURANCE .

Concurrent Sessions 1, Monday, June 4, 11:00 a.m. –12:15 p.m., Salon FG Concurrent Sessions 2, Monday, June 4, 1:15 p.m. – 2:30 p.m., Salon HI

Last year's Hurricane Harvey was almost entirely a precipitation event and so it had not been included in U.S. flood models until recently. This session will feature recent releases of U.S. inland flood models that include hurricane precipitation modeling. Session panelists will discuss ongoing NFIP initiatives that cover modeling, rating redesign and the NFIP reinsurance program, which will have implications for private market participation in the U.S. residential flood market.

Moderator/Speaker: John Kulik, Senior Vice President, Guy Carpenter & Co. LLC

Speakers: Mitchell Waldner, Actuary, FEMA/DHS

David Smith, Senior Leader, CoreLogic Guy Morrow, Managing Member, KatRisk

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Concurrent Sessions 4, Monday, June 4, 4:30 p.m. - 5:45 p.m., Salon B

Florida is a large unique U.S. insurance market that is a major market for many reinsurers. Florida has its challenges for the insurance community, including the prominent catastrophe exposure present in the marketplace, as well as difficult precedents and the legal environment in some lines of business. Florida is unique because many less capitalized insurers operate in the property space along with the state-run Citizens Insurance Company. The session will touch on the state of the Florida marketplace, including assignment of benefits, current pricing trends, capitalization and rating agency considerations. The session will also touch base on the marketplace in light of recent experience including catastrophes.

Moderator: Joseph Milicia, Willis Towers Watson

Speakers: David Flitman, CEO and President, Safepoint Insurance

Joseph Petrelli, President, Demotech, Inc.

☐ 6 C-10: GEOSCIENCE REVIEW ☐

Concurrent Sessions 2, Monday, June 4, 1:15 p.m. - 2:30 p.m., Salon FG

This session will focus on the major natural catastrophe events of 2017. The events include hurricane Harvey and Irma, the California wildfires, and a specific emphasis on lessons learned and thoughts for the future from a geoscience perspective. A comparison of the two storms will highlight the differences in the storm characteristics and the ultimate impact of building code enforcement, demographic shifts and urban planning. Additionally, we'll review the unique characteristics (grey swan) of the Tubbs fire regarding urban conflagration and wind speeds. Lastly, we'll cover general observations regarding climate change and the impact of future perils and events.

Moderator: Mark Westmoreland, Senior Vice President - Property Underwriting Manager,

Munich Re America, Inc.

Speaker: Mark Bove, Munich Re Group

lacktriangled lacktriangled C-11: Marine and Energy line of Business overview lacktriangled

Concurrent Sessions 7, Tuesday, June 5, 11:00 a.m. - 12:15 p.m., Salon F

This session will provide an extensive overview of the marine and energy insurance and reinsurance markets. Starting with the basics of primary coverages and pricing, we'll establish a foundation of knowledge to then explore the intricacies of the reinsurance programs that support the marketplace. Lastly, we'll conduct a forward-looking review focused on emerging exposures and recent large loss claims and their implications on the marketplace.

Moderator: Mark Westmoreland, Senior Vice President - Property Underwriting Manager,

Munich Re America, Inc.

Speakers: Brian Stroop, Senior Vice President, Guy Carpenter & Co. LLC

Scott Johnson, Vice President, Munich Re America, Inc.

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Concurrent Sessions 5, Tuesday, June 5, 8:00 a.m. - 9:15 a.m., Salon F

Fannie Mae and Freddie Mac mortgage credit risk-sharing insurance transactions have expanded the opportunity for reinsurers to participate in the mortgage credit risk markets beyond reinsuring the private mortgage insurers. Reinsurers have seized this growth opportunity in the face of significant competitive pressures affecting much of their traditional business. This session will examine the dynamic evolution of the credit risk transfer market, which has seen numerous new product features as well as completely new structures. Rating agency and regulatory responses to the growth of this market will also be covered.

Moderator/Speaker: Michael Schmitz, Principal and Consulting Actuary, Milliman, Inc.

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Concurrent Sessions 3, Monday, June 4, 3:00 p.m. – 4:15 p.m., Salon B

The reinsurance market has experienced many nontraditional reinsurance structures that have been of major significance to the insurance and reinsurance marketplace. The business of runoff has also become prevalent worldwide as a new market for reinsurers. The session will discuss trends in the runoff market and the nontraditional reinsurance market, including runoff.

Moderator/Speaker: Joshua Fishman, Senior Vice President, Willis Towers Watson

Speaker: Kenneth Kruger, Head of Structured Reinsurance, Munich Re America, Inc.

lacktriangled \bullet \bullet C-14: PURCHASE ACCOUNTING PGAAP, IFRS AND CAPITAL CHARGES: IMPACTS TO THE REINSURANCE INDUSTRY \P

Concurrent Sessions 2, Monday, June 4, 1:15 p.m. - 2:30 p.m., Salon A

The reinsurance industry has experienced significant activity in the mergers and acquisition arena. This session focuses on the purchase accounting ramifications associated with mergers and acquisition activity. Since the International Financial Reporting Standards accounting has also been implemented, this session will also focus on how IFRS will affect the reinsurance actuarial community.

Moderator/Speaker: John Ferrara, EY

Speaker: Dawn Fowle, Senior Manager, EY

☐ 6-15: RATING AGENCY UPDATE: A REINSURANCE FOCUS •

Concurrent Sessions 3, Monday, June 4, 3:00 p.m. - 4:15 p.m., Salon HI

This session will provide an update from the major rating agencies regarding the U.S. property-casualty industry and global reinsurance market. The reinsurance sector has faced major challenges and changes this past year including major catastrophe activity, M&A and regulatory changes. This session will include views on their sector outlooks, changes to their rating criteria and updates to their capital adequacy models. Also, we will cover how a company's reinsurance program is considered in the rating evaluation process.

Moderator/Speaker: Raju Bohra, Executive Vice President, Willis Towers Watson

Speakers: Hardeep Manku, S&P Global

Stanislas Rouyer, Associate Managing Director, Moody's Investors Service

Steven Chirico, Assistant Vice President, A.M. Best

☐ 6 C-16: RESEARCH CORNER 9

Concurrent Sessions 5, Tuesday, June 5, 8:00 a.m. - 9:15 a.m., Salon B

Hosted by the CAS Reinsurance Research Committee, the Research Corner is a forum for presenting preliminary reports on works in progress or recently completed.

Dmitry Papush of Swiss Re will present his paper on approximating aggregate loss distributions for the first half of the session.

During the second half of the session, Research Corner participants can pose new problems and demonstrate innovative practical approaches. Individual investigators as well as representatives of research working parties and other groups are encouraged to participate. There is no need to preregister — "walk-in" speakers are most welcome, though advance notice is appreciated whenever possible. Speakers should plan on having 10 to 15 minutes to make their presentations. Attendees who would like to present their work during this session are invited to contact the moderator.

Moderator: Lon Chang, Senior, EY

Speakers: Isaac Espinoza, Actuary, Greenlight Reinsurance Ltd.

Dmitry Papush, Vice President, Senior Actuary, Swiss Re America

Jasmine Zhang, University of Chicago

☐ • • C-17: RUNOFF •

Concurrent Sessions 1, Monday, June 4, 11:00 a.m. – 12:15 p.m., Salon B

The session will describe runoff as a business and will have an actuary from a runoff reinsurance business speak on what it is like to be in this environment. The session will also provide information on the new legislation in Oklahoma and Rhode Island and how it may impact the runoff reinsurance business.

Moderator/Speaker: John Ferrara, EY

Speakers: Thomas McIntyre, Premia Re

Luann Petrellis, Managing Director, PricewaterhouseCoopers

lacktriangled \bullet \bullet C-18: SEVERE CONVECTIVE STORM MODELING CHALLENGES AND ENSO IMPACT \P

Concurrent Sessions 3, Monday, June 4, 3:00 p.m. - 4:15 p.m., Salon A

In this session, we will go through the severe convective storm modeling methodology and discuss the key challenges for model. In this session, we will lead you to review the past 60 years of U.S. industry experience and trend, and bring out discussion on pricing challenges for actuaries. Our vendor model expert will provide a brief introduction of SCS modeling components, and dive into major assumptions and challenges, and recommendations of best practices for applying model for pricing. Recent research of ENSO impact to SCS activity will be presented, and a demonstration of how you can incorporate research results into your modeling, pricing and managing the risk.

Moderator/Speaker: Xingzhi Wu, AXIS Capital Insurance Speakers: Chris Bednarczyk, AIR Worldwide

Prasad Gunturi, Executive Vice President, Willis Towers Watson

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Concurrent Sessions 5, Tuesday, June 5, 8:00 a.m. – 9:15 a.m., Salon A Concurrent Sessions 6, Tuesday, June 5, 9:30 a.m. – 10:45 a.m., Salon A

The current federal government administration has instituted tax reform, which has a great impact on the reinsurance business. It affects both inter-company deals as well as where companies will operate its reinsurance business and hire its employees.

Moderator/Speaker: Raju Bohra, Executive Vice President, Willis Towers Watson
Speaker: Paul H. Phillips III, Tax Partner - Financial Services, EY LLP

Scott Williamson, Vice President - Financial Analysis, Reinsurance Association

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Concurrent Sessions 1, Monday, June 4, 11:00 a.m. – 12:15 p.m., Salon HI Concurrent Sessions 4, Monday, June 4, 4:30 p.m. – 5:45 p.m., Salon FG

The entire insurance value chain is being disrupted by a combination of insurtech startups, digital, telematics, connected home, connected worker, connected everything, data science, unstructured data, machine learning and artificial intelligence. Based on their position at the top of the value chain, reinsurers actually have natural advantages for thriving in such an environment. To capitalize on these opportunities, however, reinsurance actuaries and underwriters will need to adapt their skills and mindset to the new realities. This session will discuss these adaptations from complementary outside and inside perspectives.

Moderator/Speaker: Donald Mango, Columbia University

Speaker: Robert Weireter, Senior Underwriter, Swiss Re

☐ C-21: THE REINSURANCE INDUSTRY: AN EQUITY ANALYST VIEW

Concurrent Sessions 7, Tuesday, June 5, 11:00 a.m. - 12:15 p.m., Salon C

The reinsurance industry continues to evolve in how its capital is financed. Capital from a variety of sources now support the operation of reinsurance companies, including Wall Street, hedge funds and private equity. How financial analysts outside the actuarial community view the industry is critically important to understand.

During this session, key questions will be considered by our panel of analysts:

- What metrics do they use to analyze results?
- What key performance levels are analysts and investors looking for?
- Where do these analysts and their clients see the industry headed?
- What will be the impact of recent catastrophes that have hit the industry?
- Are they forecasting a hard market or continued softening?
- And maybe most importantly, is the short-term focus for which Wall Street is famous, compatible with an
 industry that requires a long-term perspective?

Moderator: Raju Bohra, Executive Vice President, Willis Towers Watson

Speakers: Meyer Shields, Keefe, Bruyette & Woods, Inc.

William Wilt, President, Assured Research, LLC James Naklicki, Senior Analyst - P&C, Citi Research

\square $\stackrel{\bullet}{\bullet}$ $\stackrel{\bullet}{\bullet}$ C-22: UNDERWRITE THE U.S. AGRICULTURE INSURANCE \P

Concurrent Sessions 2, Monday, June 4, 1:15 p.m. – 2:30 p.m., Salon C

This session will look at this specialty line of business with two highly experienced technical underwriters from the market.

Moderator: Subhayu Bose, Guy Carpenter & Co. LLC

Speaker: James (J.D.) Long, Vice President, Renaissance Re

☐ 6 C-23: WHEELS SPINNING 9

Concurrent Sessions 1, Monday, June 4, 11:00 a.m. -12:15 p.m., Salon C

This session will provide an update to the commercial auto industry experience, most recently presented at the CAS Wheels Down Webinar. Additional industry insights will be given, including bringing in various industry and governmental sources, and a diagnosis of the past and potential remedies for the future. An underwriter who has lived through the wheels ups and downs over the last decade will give her experience from a ground-level perspective, including measures to help underwriters improve their insights in this continually challenging line of business.

Moderator/Speaker: John Buchanan, Principal, Excess & Reinsurance, ISO

Speakers: William Wilt, President, Assured Research, LLC

William Burns, Vice President, Conning

Diane Injic, Director - Commercial Auto Underwriting, Verisk

☐ 6 C-24: WORKERS' COMPENSATION - EMERGING ISSUES •

Concurrent Sessions 6, Tuesday, June 5, 9:30 a.m. – 10:45 a.m., Salon B Concurrent Sessions 7, Tuesday, June 5, 11:00 a.m. – 12:15 p.m., Salon B

This session will be an interactive discussion of various workers' compensation emerging issues and their potential impact on the workers' compensation system, including coverage, claims and premium. The emerging issues will include opioids, shared economy, marijuana and wearable technology.

Moderator/Speaker: Kristen Tripp, Assistant Vice President, Swiss Re

Speakers: Patrick O'Dell, Vice President, Swiss Re America

Kevin Bingham, Principal, Deloitte Consulting, LLP

Sean Cooper, Director & Actuary, National Council on Compensation

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