Spring Meeting
May 13-16, 2018
Boston Marriott Copley Place
Boston, MA
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General Information
For more information on the following, please consult the CAS Spring Meeting website, www.casact.org/Spring, or the Spring Meeting app on your smartphone.

Consent to Use of Photographic Images
A photographer will be present at the CAS Spring Meeting. Registration and attendance at, or participation in, CAS meetings, seminars and other activities constitutes an agreement by the registrant to CAS’s use and distribution (both now and in the future) of the registrant or attendee’s image or voice in photographs, videotapes, electronic reproduction and audiotapes of such events and activities.

Antitrust Notice
The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Meetings conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings. Under no circumstances shall CAS meetings be used as a means for competing companies or firms to reach an understanding — expressed or implied — that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition. It is the responsibility of all meeting participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.

For more complete information regarding the CAS antitrust compliance policy, please refer to the CAS Website at http://bit.ly/20UMw6Z.

Speaker Opinions
The opinions expressed by speakers at this event are their own and do not necessarily reflect the positions of the CAS.
Registration Hours

The registration desk will be open as follows at the 4th Floor Registration Desks.

- Sunday, May 13 - 4:00 p.m. – 6:30 p.m.
- Monday, May 14 - 7:00 a.m. – 4:30 p.m.
- Tuesday, May 15 - 7:00 a.m. – 11:30 a.m.
- Tuesday, May 15 – 12:45 p.m. – 2:00 p.m.
- Wednesday, May 16 - 7:00 a.m. – 11:30 a.m.

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 Marriott Copley Place may be held responsible for lost or stolen items.
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*Speaker Coach
Wireless Access

Attendees of the CAS Spring Meeting have access to complimentary Wi-Fi in the meeting rooms.

Wi-Fi Login: CAS_Spring
Wi-Fi Password: Spring2018

Download the CAS Meeting App

Tweet at the CAS Spring Meeting!

We want to hear from you! Tweet about the Spring Meeting educational sessions and meeting events using the hashtag #CASSpring.

Follow the CAS on Twitter @CASact
Social Media

The CAS is on Facebook, Twitter and LinkedIn! Stay informed by following the CAS on social media for exclusive updates on CAS activities! The CAS Facebook, Twitter and LinkedIn pages 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 casact.org and click the social media widgets to find our pages!
Celebration of New Members

Monday, May 14, 8:00 a.m. – 8:30 a.m., Salons E-G (4th Floor)

This event includes the Address to New Members given by Mary Hennessy, FCAS.

Tuesday Buffet Dinner at Boston Children’s Museum

7:00 p.m. – 10:00 p.m.

Prepare to play! On Tuesday evening, the Boston Children's Museum hosts CAS Spring Meeting attendees for a night of fun with a whimsical spin on networking. Located in the heart of Boston’s Innovation District and situated right on Boston’s Fort Point Channel, the museum is an eclectic venue offering some of the most breathtaking views of Boston’s magnificent skyline. The entire museum is available for exploration and amusement, and you are encouraged to engage in the interactive experiences throughout the venue.
Student Program

Tuesday, May 15, 8:40 a.m. – 4:15 p.m., Simmons (3rd Floor)

The Casualty Actuarial Society is hosting 30 university students for a one-day student program to be held in conjunction with the Spring Meeting on May 15. The program is an important opportunity to plant the seeds for the future of the CAS by connecting with university students in a meaningful way.

Attendees Will:

• Learn more about the CAS and the property-casualty insurance industry.
• Connect with CAS members and participate in a speed network session.
• Attend professional concurrent sessions and student-specific sessions.
• Take professional headshots.
Congratulations to Travelers’ newly credentialed CAS actuaries.

**ACAS**
Robert Golightly, Cara Heffling, Brooke Katzmarek, Stephanie Lerner, James Low, Justin Rubin, Winnie Sloan, Alyssa Westfall

**FCAS**
Kara Anderson, Andrew Brady, John Massari, Bette Suter, Min Xu, Erin Yetter

We are proud of you and your accomplishments!
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<th>Monday, 3:15 – 4:30</th>
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<td>CAS</td>
<td>C-30</td>
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<tr>
<td>Catastrophes</td>
<td>C-32</td>
<td>C-21</td>
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<td>Cyber</td>
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<td>Emerging Issues</td>
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<td>LL-1, C-18</td>
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<td>ERM</td>
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<td>International</td>
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<td>Predictive Analytics</td>
<td>C-10</td>
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<tr>
<td>Pricing</td>
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<td>C-3</td>
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<tr>
<td>Professionalism</td>
<td>C-2</td>
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<td>Regulatory</td>
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<td>Reinsurance</td>
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<td>Research</td>
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<td>Reserving</td>
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<td>Workers’ Comp</td>
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## Corresponding Concurrent Sessions and Times

<table>
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<th>Tuesday, 10:00 – 11:15</th>
<th>Tuesday, 1:15 – 2:30</th>
<th>Wednesday, 8:00 – 9:15</th>
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<td>C-5</td>
<td>C-5R, C-15</td>
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<td>C-20</td>
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<td>C-12</td>
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<td>C-7, C-13</td>
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<td>C-23</td>
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<td>C-33</td>
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</tbody>
</table>
Meeting Schedule

Sunday, May 13

4:00 p.m. – 6:30 p.m.  Registration

5:00 p.m. – 6:00 p.m.  (Optional) DD-1: The Most Important Risk Measures You Never Heard Of: Sneak Preview

5:00 p.m. – 6:30 p.m.  Recognition Reception for New Associates and their Spouses/Guests (including New ACAS Group Photo Session)

6:30 p.m. – 7:30 p.m.  Welcome Reception

Monday, May 14

7:00 a.m. – 4:30 p.m.  Registration

7:00 a.m. – 8:30 a.m.  Continental Breakfast

8:00 a.m. – 8:30 a.m.  Welcome, Celebration of New Members

8:30 a.m. – 9:00 a.m.  Refreshment Break

8:30 a.m. – 9:00 a.m.  New Member Group Photo Session

9:00 a.m. – 10:00 a.m.  Featured Speaker: Jeffrey Ma

10:00 a.m. – 10:45 a.m.  Business Session

10:45 a.m. – 11:15 a.m.  Refreshment Break

11:15 a.m. – 12:30 p.m.  General Session I

12:30 p.m. – 1:30 p.m.  Luncheon
Sunday, May 13
4:00 p.m. – 6:30 p.m. Registration
Registration Desks A & B (4th Floor)

5:00 p.m. – 6:00 p.m. (Optional) DD-1: The Most Important Risk Measures You Never Heard Of: Sneak Preview
Salons H-K (4th Floor)

5:00 p.m. – 6:30 p.m. Recognition Reception for New Associates and their Spouses/Guests
(including New ACAS Group Photo Session)
Gloucester (3rd Floor)

6:30 p.m. – 7:30 p.m. Welcome Reception
Back Bay (3rd Floor)

Monday, May 14
7:00 a.m. – 4:30 p.m. Registration
Registration Desks A & B (4th Floor)

7:00 a.m. – 8:30 a.m. Continental Breakfast
Back Bay (3rd Floor)

8:00 a.m. – 8:30 a.m. Welcome, Celebration of New Members
Salons E-G (4th Floor)

8:30 a.m. – 9:00 a.m. Refreshment Break
Back Bay (3rd Floor)

8:30 a.m. – 9:00 a.m. New Member Group Photo Session
Provincetown (4th Floor)

9:00 a.m. – 10:00 a.m. Featured Speaker: Jeffrey Ma
Salons E-G (4th Floor)

10:00 a.m. – 10:45 a.m. Business Session
Salons E-G (4th Floor)

10:45 a.m. – 11:15 a.m. Refreshment Break
Back Bay (3rd Floor)

11:15 a.m. – 12:30 p.m. General Session I
Salons E-G (4th Floor)

12:30 p.m. – 1:30 p.m. Luncheon
Back Bay (3rd Floor)
**Meeting Schedule**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1:30 p.m. – 2:45 p.m.</td>
<td><strong>Concurrent Sessions 1</strong></td>
</tr>
<tr>
<td>Suffolk</td>
<td>Wellesley</td>
</tr>
<tr>
<td>P-3</td>
<td>C-30</td>
</tr>
<tr>
<td>Salons A-B</td>
<td>Salons C-D</td>
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<tr>
<td>C-2</td>
<td>P-1</td>
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<tr>
<td></td>
<td>Refreshment Break</td>
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<tr>
<td>2:45 p.m. – 3:15 p.m.</td>
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<tr>
<td>3:15 p.m. – 4:30 p.m.</td>
<td><strong>Concurrent Session 2</strong></td>
</tr>
<tr>
<td>Wellesley</td>
<td>Salons A-B</td>
</tr>
<tr>
<td>LL-1</td>
<td>C-21</td>
</tr>
<tr>
<td>Salons C-D</td>
<td>Salons H-I</td>
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<tr>
<td>C-3</td>
<td>C-17</td>
</tr>
<tr>
<td>5:00 p.m. – 6:00 p.m.</td>
<td>Officers’ Reception for New Fellows and their Spouses/Guests</td>
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</tbody>
</table>

*Remainder of evening is yours to enjoy.*

**Tuesday, May 15**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>7:00 a.m. – 11:30 a.m.</td>
<td>Registration</td>
</tr>
<tr>
<td>7:00 a.m. – 9:00 a.m.</td>
<td>Continental Breakfast</td>
</tr>
<tr>
<td>8:00 a.m. – 9:30 a.m.</td>
<td>General Session II</td>
</tr>
<tr>
<td>8:00 a.m. – 9:30 a.m.</td>
<td>General Session III</td>
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<tr>
<td>8:40 a.m. – 4:15 p.m.</td>
<td>Student Program</td>
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<tr>
<td>9:30 a.m. – 10:00 a.m.</td>
<td>Refreshment Break</td>
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</table>
Meeting Schedule

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<thead>
<tr>
<th>Salons H-I</th>
<th>Salons J-K</th>
<th>Salon E</th>
<th>Salon F</th>
<th>Salon G</th>
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<tbody>
<tr>
<td>C-4</td>
<td>C-10</td>
<td>C-11</td>
<td>C-1</td>
<td>C-32</td>
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Back Bay (3rd Floor)

<table>
<thead>
<tr>
<th>Salons J-K</th>
<th>Salon E</th>
<th>Salon F</th>
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<tr>
<td>P-2</td>
<td>C-27</td>
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</table>

3rd Floor Floor Atrium & Marble

Registration Desks A & B (4th Floor)

Back Bay (3rd Floor)

Salon E (4th Floor)

Salon F (4th Floor)

Simmons (3rd Floor)

Back Bay (3rd Floor)
# Meeting Schedule

10:00 a.m. – 11:15 a.m. **Concurrent Session 3**

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<th>Wellesley</th>
<th>Salons A-B</th>
<th>Salons C-D</th>
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<tbody>
<tr>
<td>C-7</td>
<td>C-13</td>
<td>C-33</td>
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</tbody>
</table>

11:15 a.m. – 1:15 p.m. Lunch on Your Own

12:45 p.m. – 2:00 p.m. Registration

1:15 p.m. – 2:30 p.m. **Concurrent Session 4**

<table>
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<tr>
<th>Suffolk</th>
<th>Wellesley</th>
<th>Salons A-B</th>
<th>Salons C-D</th>
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<tbody>
<tr>
<td>C-23</td>
<td>C-9</td>
<td>DD-2</td>
<td>C-5R</td>
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</table>

2:45 p.m. – 4:00 p.m. Concurrent Session 19 (Livestream)

3:00 p.m. – 4:00 p.m. Roundtables

<table>
<thead>
<tr>
<th>Suffolk</th>
<th>Wellesley</th>
<th>Salons A-B</th>
<th>Salons C-D</th>
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<tr>
<td>RT-1</td>
<td>RT-2</td>
<td>RT-3</td>
<td>RT-4</td>
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</table>

4:15 p.m. – 5:30 p.m. Concurrent Session 8R (Livestream)

7:00 p.m. – 10:00 p.m. Tuesday Buffet Dinner at Boston Children’s Museum, sponsored by The CAS Institute
**Meeting Schedule**

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Registration Desks A & B (4th Floor)

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<td>C-8</td>
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</table>

Salon F (4th Floor)

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</table>

Salon F (4th Floor)
Wednesday, May 16

7:00 a.m. – 11:30 a.m.  Registration

7:00 a.m. – 9:00 a.m.  Continental Breakfast

8:00 a.m. – 9:15 a.m.  Concurrent Session 5

<table>
<thead>
<tr>
<th>Suffolk</th>
<th>Salons A-B</th>
<th>Salons C-D</th>
<th>Salons H-I</th>
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<tr>
<td>LL-2</td>
<td>DD-3</td>
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<td>C-14</td>
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</table>

9:15 a.m. – 9:45 a.m.  Refreshment Break

9:45 a.m. – 11:30 a.m.  General Session IV & Adjournment
Meeting Schedule

- Registration Desks A & B (4th Floor)
- Back Bay (3rd Floor)

<table>
<thead>
<tr>
<th>Salons J-K</th>
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<th>Salon F</th>
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<td>C-27R</td>
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- Back Bay (3rd Floor)
- Salons E-G (4th Floor)
The CAS appreciates the support of the 2018 Spring Meeting Sponsors.

<table>
<thead>
<tr>
<th>The CAS Institute</th>
<th>Sponsor</th>
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<tr>
<td>Milliman</td>
<td>Diamond Partner, Sponsor</td>
</tr>
<tr>
<td>Pinnacle Actuarial Resources</td>
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<td>Pryor Associates Executive Search</td>
<td>The Travelers Companies, Inc.</td>
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<td>Diamond Partner, Sponsor</td>
<td>Silver Partner, Advertiser, Sponsor</td>
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F-1: The House Advantage: How to Win with Data

Monday, May 14, 9:00 a.m. - 10:00 a.m., Salons E-G (4th Floor)

As one of the leaders of the infamous MIT Blackjack team, Jeff Ma was the inspiration for the main character in the best-selling book Bring Down the House and the hit movie 21. In addition, he has helped start four different companies including GolfSpan.com (sold to Demand Media), CircleLending (sold to Virgin), Citizen Sports (sold to Yahoo) and tenXer (acquired by Twitter). In that time, he has become a sought-after speaker who shows companies how to harness the power of numbers to make better bottom-line business decisions; decisions that, often, are the difference between winning and losing. Jeff Ma’s featured address will focus on data-driven solutions.

Beyond his work in the start-up world, Ma has worked as a consultant to the San Francisco 49ers, the Portland Trail Blazers and Adidas, helping them to make better decisions using data and analytics. He spent two years working as on air talent for ESPN and served as their predictive analytics expert. His book, The House Advantage: Playing the Odds to Win Big in Business, was a business bestseller and draws on his unique experiences at the table and in the sports world creating a truly accessible work about business analytics.

Ma currently serves as the vice president of analytics at Twitter, where he leads the central analytics and data science team helping the company to make better data-driven decisions. He is working on his second book which will explore the second chapter of big data in the real world.
More detail about the sessions and speakers is found on the CAS Meeting app. All sessions will be recorded (simultaneously audio, slides), except where indicated.

### 2018 Spring Meeting — Key to Complexity of Sessions

- **Basic.** No prior knowledge of the subject matter is assumed. Little or no technical content.
- **Intermediate.** General knowledge of the subject matter is assumed. Moderate technical content.
- **Advanced.** Working knowledge of the subject matter is assumed. Moderate to highly technical content.

**Checkbox for Personal Attendance Record**

- **Recorded Session**
- **Livestreamed Session**
OPTIONAL CONCURRENT SESSION

Sunday, May 13, 5:00 p.m. - 6:00 p.m.

☐ 🌸 🌸 DD-1: The Most Important Risk Measures You Never Heard Of: Sneak Preview

Salons H-K

(Part 1 in a series)

This introductory session is aimed at ERM professionals who want an overview of the motivation for and mechanics of spectral risk measures (a.k.a. distortion or dual utility risk measures). The session will touch upon some of the material that will be presented in more detail in subsequent sessions.

Moderator/Panelist: John Major

Panelists: Stephen Mildenhall; Jesse Nickerson
GENERAL SESSION 1

Monday, May 14, 11:15 a.m.–12:30 p.m.

GS-1: Think You Know All About Diversity and Inclusion? Three Perspectives That May Surprise You

Panelists who are on the front lines of implementing diversity and inclusion in the workplace will share reasons and strategies for diversity and inclusion. Members may determine that this session qualifies for professionalism CPE credit.

Moderator/Panelist: Mallika Bender

Panelists: Erika Schurr; Lori Bailey; Dawn Frazier-Bohnert
C-1: Actuarial Applications of Deep Learning: Loss Reserving and Beyond

Salon F

This session explores deep learning and how it can be relevant to actuaries. Topics to be covered include: an overview of concepts in neural network architecture and model training, the development of simple models to solidify our understanding,* a demonstration of neural architecture for forecasting losses using publicly available Schedule P data and discussion of possible extensions to the framework, additional data that can be utilized, and other potential applications in insurance of deep learning.

*Participants will be asked to bring a laptop; internet connection will be required as the programming environment will be hosted online.

Moderator/Panelist: Nicole Foster
Panelists: Kevin Kuo; Joe Fang
C-2: Actuarial Trivia Challenge!

Salons A-B

Repeated on Tuesday, May 15, 10:00 a.m.–11:15 a.m.

The CAS Professionalism Education Committee presents the latest incarnation of its actuarial trivia format. Using the Kahoot app, audience members will answer a series of multiple-choice trivia questions that will test the depth of their knowledge on the profession’s professional standards.

Moderator: Katey Walker
Panelists: Kimberly Guerriero; Jeffrey Casaday; Michael Starke; Andrew Dalgaard
C-4: Applying Brain Rules For Effective Presentations

Salons H-I

Got PowerPoint? Got numbers? Got cool charts? Check! Check! Check! Ready to give an effective presentation? Maybe not. Applying adult learning theory, specifically ”Brain Rules,” this interactive session will both explore specific rules that apply to presentations and collaboratively diagnose enhancements to a number of sample slides. Participants may even send the presenters a sample “problem slide.”

Email to: stephanier@holborn.com

Moderator: Dave Core
Panelists: Stephanie Rabin; Beverly Phillips

C-10: Ensembles and Combining Models

Salons J-K

The presenters will describe the rationale and explain the effectiveness of ensembles in general as powerful predictive analytical tools, as well as the basic approaches of bagging and boosting for ensembles of trees. Advantages of ensembles on insurance data, issues surrounding complex models, strategies for combining linear regression and ensemble models will be explored.

Moderator/Panelist: Christopher Cooksey
Panelist: Alejandro Ortega
C-11: ERM and Capital Modeling — Are We Achieving Intended Purposes

Salon E

How are the results of internal company economic capital models being used in conjunction with the results of other regulatory and or rating agency models (i.e., BCAR, NAIC RBC, etc.). How can the use and results of such models be integrated with risk management and multi-year strategic planning? Have we evolved our standards of practice to an acceptable level or is there more work to do? These and other questions will be addressed by the panelists.

Moderator: Robert Wolf
Panelists: Micah Woolstenhulme; David Ingram
C-30: Update from Admissions

Wellesley

Hear about the latest developments in CAS Admissions, including the new MAS exams, Integrative Questions and Technology-Based Examinations. Candidates and members are welcome to attend to interact with the presenters.

Moderator/Panelist: Jason Russ
Panelist: Jeanne Crowell

C-32: What You Don't Know about Wildfires ... Can Cost You ⚠️

Salon G

In this session, two wildfire experts review the mechanics of structural wildfire losses, how wildfire exposure can be quantified before a loss event, why wildfires respond well to pre-event mitigation actions and what people still need to know.

Moderator: Zach Brogadir
Panelists: Howard Kunst; Michele Steinberg
P-1: Excess of Policy Limits Losses and Bivariate Excess Losses

Salons C-D

At this session authors of recent research papers will present “An Actuarial Model of Excess of Policy Limits Losses” and “Analysis of Bivariate Excess Losses.”

The first paper proposes using a classic actuarial framework of frequency and severity, modified to address the unique challenge of excess of policy limits (XPL) losses. In the first part of the second paper, the author introduces a formula for calculating the higher moments, based on which it is shown that they can be obtained directly from the Table of Insurance Charges (Table M) and in the second part of the paper, introduces the concept of bivariate excess losses.

Moderator/Panelist: Jiandong Ren
Panelist: Neil Bodoff
P-3: Worldwide Tropical Cyclone Activity Measured Using the Actuaries Climate Index Methodology

Suffolk

Winning paper from 2018 Climate Change Call for Papers.

Using the methodology of the Actuaries Climate Index®, this paper shows the results of a global index of tropical cyclone activity based on accumulated cyclone energy (ACE) data. Based on the index, trends in worldwide tropical cyclone activity over the period with good data (1985 – 2017) have been flat to downward, but this time period is not sufficiently long for a credible conclusion on trends.

Moderator/Panelist: Douglas Collins
CONCURRENT SESSIONS

Monday, May 14, 3:15 p.m.–4:30 p.m.

保卫 M. Best New Rating Methodology

Salons C-D

This session will examine the critical rating drivers and highlight the potential impacts of the new Best’s Credit Rating Methodology (BCRM) on financial strength ratings of the property-casualty insurance sector. The overall assessment of the new methodology reflecting year-end 2017 financials will be considered.

Moderator: Robert Wolf

Panelists: Jennifer Marshall; Raju Bohra
C-17: Improved Efficiencies Through Automation and Robotics Process Automation Can Lead to Innovative Solutions

Salons H-I

This session will present how investment in transforming the actuarial process can free up current talent, through automation and actuarial Robotics, and provide a structure for deeper dive reserve analyses, including claim-level actuarial reserving.

Moderator/Panelist: Ian Sterling
Panelists: Jeffrey Drew; Marcela Granados; Jason Nikowitz

C-18: Insurtech — Helpful or Hype? Is Predictive Modeling Modeling Insurtech?

Salon G

This interactive session will explore the fun but perhaps unenviable task of separating the hype from the hyperbole when it comes to insurtech. This session will explore some baseline questions to open the veil: What is the definition of insurtech? What is insurtech realistically going to look like in the near future? What is in the pipeline? How will it affect commercial vs. personal lines insurance?

Moderator: Stephanie Rabin
Panelists: Matt Perlman; Philip Edmundson; Russell MacTough; Charles Svirk
C-21: It was HIM in 2017. What will happen in 2018? Will it be HER?

Salons A-B

The year 2017 was one of the top 10 most active hurricane seasons on record for the Atlantic Basin. It was, therefore, a very expensive hurricane year for the insurance and reinsurance businesses in North America. This panel will review the 2017 season and look at what may be in store for the 2018 season. In addition, it will look at the effect of the 2017 year on the insurance and reinsurance market in 2018.

Moderator: Dave Snow
Panelists: Eric Enslin; Hisayo Murakami

C-22: Lights! Camera! Professionalism!

Salon F

You will walk away from this session with a better understanding of the ASOPs and the Codes of Conduct, and how to apply them when you face your own professional ethical dilemmas. This session may be counted as professionalism credit for continuing education.

Moderator: Katey Walker
Panelists: Patricia Teufel; Brandon Shain; Mary Hosford
C-27: Regulatory Trends in the Age of Big Data

Salon E

Repeated on Wednesday, May 16, 8:00 a.m. – 9:15 a.m.

Join this session to learn the latest regulatory challenges and trends, see how insurers can navigate the regulatory landscape given the emphasis on big data insights and analytics.

Moderator/Panelist: Robert Curry
Panelists: Dorothy Andrews; James Weiss

LL-1: Generating Research to Meet Current Actuarial Challenges

Wellesley

At this Learning Lounge, members of various CAS research committees will engage participants in selecting the ideas for new research possibly covering such areas as ratemaking, reinsurance, cyber, reserving, depending on which committees are to be represented.

Moderator: Brian Fannin
Panelists: John Xu; Ben Goodman; Chris Holt
P-2: Modeling Applications for Loss Development

Salons J-K

At this session, authors of recent research papers on “Strategies for Modeling Loss Development” and “A Comparison of Resampling Methods for Bootstrapping Triangle GLMs” will present their findings.

Moderator/Panelist: Thomas Hartl
Panelist: Uri Korn

GENERAL SESSION 2 / 3

Tuesday, May 15, 8:00 a.m. – 9:30 a.m.

GS-2: Insurers are like Zoos — More Compelling When There Are Cats on Offer

Salon E

Complicating the strategic agenda for many underwriters is an increasing intolerance for natural catastrophe risk exposure, especially given that 2017 included three hurricanes, a Mexico earthquake, and two wildfires. But what if the way to achieve growth could be accomplished by getting smarter about catastrophe exposure management?

Moderator: Dustin Loeffler
Panelists: Paul Eaton; Peter Sousounis
GS-3: Where is the Insurance Cycle? [Microphone] [Camera]
Salon F
Are we entering a hard market after the 2017 catastrophes? The speakers will explain why actual evidence may be hard to find.

Moderator: Benoit Carrier
Panelists: James Lynch; Stephen Mildenhall

CONCURRENT SESSIONS
Tuesday, May 15, 10:00 a.m. – 11:15 a.m.

C-2R: Actuarial Trivia Challenge!
Salons J-K
Repeated on Monday, May 14, 1:30 p.m.–2:45 p.m.
The CAS Professionalism Education Committee presents the latest incarnation of its actuarial trivia format. Using the Kahoot app, audience members will answer a series of multiple-choice trivia questions that will test the depth of their knowledge on the profession’s professional standards.

Moderator: Katey Walker
Panelists: Kimberly Guerriero; Jeffrey Casaday; Michael Starke; Andrew Dalgaard
C-5: Beyond Death by PowerPoint

Salons C-D

Repeated on Tuesday, May 15, 1:15 p.m. – 2:30 p.m.

Business experts agree that communications is one, if not the, key to success and increased income. The PPT slides are not “the presentation,” you are. This program is about the simple but essential steps, before putting bullet points on slides to insure you are targeting your audience, have a clear call to action and a focused message that your audience will understand and remember.

Panelist: Tom Kennedy

C-6: The Business of Run-Off

Salons H-I

This panel will discuss the current trends and capital entering the run-off marketplace and the likelihood that these trends will continue or change in light of changes in solvency standards and U.S. tax reforms.

Moderator: Sandy Santomenno

Panelists: James Votta; Leigh Oates; Matthew Kunish
C-7: China’s P&C Insurance Market: New Era, New Challenges

Suffolk

A panel of senior actuaries from China will share their views on these challenges in this new era. Topics include a China P&C market overview, innovative products in China P&C insurance market, update on automobile insurance reform in China, VAT taxation reform and its impact on (re)insurance and C-ROSS Phase II.

Moderator: Charles Cervinka
Panelists: Xiaoxuan Li; Jun Yan

C-12: ERM and Strategic Planning — Balancing Growth, Profit, Risk and Capital

Salon F

This session will discuss ways that ERM can play a key role in planning and managing to achieve that goal. Results from an extensive survey of ERM and Strategy within insurers will be used to show how insurer's ERM programs may or may not be consistent with their strategy.

Moderator/Panelist: Dave Ingram
Panelists: Robert Wolf; Michael Mahaffey
C-13: The European General Data Protection Regulation Applies to U.S. Companies

Wellesley

The General Data Protection Regulation (GDPR) that goes into effect on May 25, 2018, mandates that firms that collect or process data from EU-based users report any breaches in a timely manner and establish a Data Privacy Officer charged with making sure that the organization complies with the rules. At this session a U.K. insurance expert, a U.S. legal expert and a cyber expert present the background of GDPR and what it means for U.S. companies and consulting firms.

Moderator: Louis-Philippe Caron
Panelists: Shimon Simon; Kevin Angle; Stephen Viña

C-20: Is this the End of the Cyberrisk Data Drought?

Salon E

The session will review the potential value and limitations of several cyberrisk data sources and of new sources of cyberrisk data, followed by an interactive dialogue with participants exploring how they can be applied to the analysis of cyberrisk and cyberrisk aggregation.

Moderator: Keith Palmer
Panelists: Ben Goodman; Michael Solomon
C-28: Tax Reform and Impact on P&C Insurance Industry

Salon G

This in-depth session details the provisions of the December 2017 Tax Cuts and Jobs Act (TCJA), which is expected to have the most significant impact on U.S. property casualty insurers along with the potential accounting considerations.

Moderator: Walker Fain
Panelists: Lynne Bloom; Ian Sterling; Kevin Johnston

C-33: Workers’ Compensation Claim Closure Project — A Case Study

Salons A-B

A panel of actuaries, a claims manager and a risk manager will draw the landscape for why California workers' compensation is fertile ground for a claim closure project. They will explain the investment of resources and effort required to launch and maintain the effort, demonstrate how results early on in the project are manifested in actuarial data (NOT good), and provide some parameters around how long one should expect to wait before seeing favorable results emerge in your reserve study.

Moderator/Panelist: Martin King
Panelists: Beth Dupre; Esther Becker; Ryan Purcell
CONCURRENT SESSIONS

Tuesday, May 15, 1:15 p.m.–2:30 p.m.

☐ 🌼 C-5R: Beyond Death by PowerPoint 🎤

Salons C-D

Repeated on Tuesday, May 15, 10:00 a.m.–11:15 a.m.

Business experts agree that communications is one, if not the, key to success and increased income. The PPT slides are not “the presentation,” you are. This program is about the simple but essential steps, before putting bullet points on slides to insure you are targeting your audience, have a clear call to action, and a focused message which your audience will understand and remember.

Panelist: Tom Kennedy
C-8: Cyber Insurance Pricing

Salons H-I

Repeated on Tuesday, May 15, 4:15 p.m.–5:30 p.m.

Cyber insurance is currently a growing line of business, but insurers are just dipping their feet in the complexity of writing this coverage. Cyber insurance coverage differs by industry and size of the insureds’ operations. How do insurers differentiate pricing between different risks? Can cyber insurance coverage and rates be standardized, and what are the implications of doing so?

Moderator/Panelist: James Lynch
Panelists: Eduard Alpin; Michael Doyle; Peter Del Prete

C-9: Diversity & Inclusion — Incorporating Sexual Abuse Survivors’ Needs

Wellesley

In this unprecedented era, the taboo subject of sexual abuse has come to the fore in the media. Few companies, however, specifically address sexual abuse in their diversity and inclusion (D&I) programs, despite statistics indicating that many adult survivors of child sexual abuse are hidden among our co-workers.

Panelist: Nancy Allen
C-15: Explaining Actuarial Concepts to Nonactuaries

Salon F

This session will provide a hands-on demonstration of several typical actuarial concepts (IBNR, credibility, risk margins and confidence levels) by experienced practitioners. Further, the session will provide examples of some actuarial concepts fraught with snares and detours that should be approached with considerable care when presented to nonactuaries.

Moderator/Panelist: Beverly Phillips
Panelists: Joseph Herbers; Ann Conway

C-16: Game of Drones

Salon G

Speakers will discuss the applications of drone data in complex forensic investigations and underwriting processes. Other topics include the current regulatory and acceptance landscape, and what is yet to come.

Moderator: Katey Walker
Panelists: Steven Fargo; Landon Phillips
C-23: Livin’ the Dream in Asia: How to Make a Smooth Transition to an Open Competition Environment

Suffolk

The panelists will tap into their diverse experience to share their observations and their ideas of insurance markets transitioning from regulatory tariffs to competitive pricing. This session will be in the format of a conversation among the panelists and with the audience. Bring your concerns, your views, and your notepad.

Moderator: Daniel Johnston
Panelists: Victor Li; Xiaoxuan Li; Syuhada Nurazmi

C-29: Understanding the Changing Used Vehicle Market

Salons J-K

Understand how previously damaged used vehicles are affecting a company’s bottom line. These previously damaged vehicles have higher frequency and higher loss costs. By properly pricing damaged used vehicles a company can save one to two points on their combined ratio.

Moderator: Alexander Alimi
Panelists: Christopher Whipple; Robert Solomonic
C-31: Use of Machine Learning and Survival Models with Telematics for Real-Time Prediction of Automobile Claims

Salon E

This presentation is about a real-time prediction of different type of claims, based on a combination of supervised machine learning and multiple decrements survival models. The results presented are from a model that incorporates automatic vehicle location variables and claims information, and that feature engineering from external data.

Moderator: Alejandro Ortega
Panelist: Omar Lopez Tronco

Salons A-B

(Part 2 in a series)

This elementary session is aimed at ERM professionals who want to gain hands-on proficiency using spectral measures (a.k.a. distortion or dual utility risk measures). The session will focus on the construction, calibration, communication, and application of a general spectral risk measure.

Recommended: Bring your laptop so you can really dig in. If you don’t have one, we will still have everything on screen for you to follow.

Moderator/Panelist: Donald Mango

Panelists: John Major; Stephen Mildenhall; Jesse Nickerson
CONCURRENT SESSIONS
(LIVE STREAM)

Tuesday, May 15, 2:45 p.m. – 4:00 p.m.

C-19: Is there Demand for Insurance On-Demand?

Salon F

Members of the CAS Insurance On-Demand Working Party will discuss their findings on work done in the insurance on-demand (IoD) Space. Some trade articles are in the works now that cover three key aspects of IoD, all of which truly influence each other: behavioral economics, product design and actuarial approaches.

The presenters will also share some analytical results of a consumer-based survey the team issued related to this topic.

Moderator/Panelist: Stephanie Rabin

Panelists: James Weiss; Scott Swanay; Bryan Butler
ROUNDTABLES

Tuesday, May 15, 3:00 p.m. – 4:00 p.m.

☐ RT-1: Capital Allocation by Percentile Layer

Suffolk

Neil Bodoff will lead a discussion of capital allocation with emphasis on the Exam 9 paper “Capital Allocation by Percentile Layer”.

Facilitator: Neil Bodoff

☐ RT-2: A Joint Risk Management Section-Sponsored Roundtable: Optimizing Our Collaboration

Wellesley

Discuss current events and concerns as well as updates on research and tools. In the enterprise risk management Space, what are your concerns, opportunities, ideas? Have we entered an era that ERM is accepted within our domains and within our audiences? We, as a profession, have suggested standards of practice.

Facilitators: David Ingram; Robert Wolf
RT-3: Cyberrisk

Salons A-B

Participants will discuss the current issues in cyber as pertains to actuaries.

Facilitator: Michael Solomon

RT-4: Discussion with Admissions

Salons C-D

Sit down with leaders from CAS Admissions to discuss recent initiatives, including MAS exams, Integrative Questions, and Technology-Based Examinations. Share your thoughts on how we can better prepare our members of the future.

Facilitators: Jeanne Crowell; Jason Russ
RT-5: Getting Started on Economic Capital Modeling

Salons H-I

How to begin economic capital modeling, overcoming objections, securing funding and resources and other topics will be discussed.

Facilitator: Grover Edie

RT-6: The New Associates Perspective: Advancing Your Career through the CAS

Salons J-K

This new Associates-only discussion centers on the decision to pursue a career as a property-casualty actuary.

Moderator: Shelby Wolff

Facilitators: Kimberly Guerriero; Elaine Brunner; Rebecca Reich
RT-7: Strategies for Utilizing Categorical Data

Salon G

This roundtable will focus on the use of categorical data in predictive modeling, from dimensionality reduction (clustering, CHAID and multiple correspondence analysis) and modeling methods which emphasize categorical input (tree-based models and GAMs).

Facilitator: Brian Fannin
CONCURRENT SESSIONS (LIVE STREAM)

Tuesday, May 15, 4:15 p.m. – 5:30 p.m.

☐ 🌹 C-8R: Cyber Insurance Pricing 🎤 🎬

Salon F

Repeated on Tuesday, May 15, 1:15 p.m. – 2:30 p.m.

Cyber insurance is currently a growing line of business, but Insurers are just dipping their feet in the complexity of writing this coverage. Cyber insurance coverage differs by industry and size of the insureds' operations. How do insurers differentiate pricing between different risks? Can cyber insurance coverage and rates be standardized, and what are the implications of doing so?

Moderator/Panelist: James Lynch

Panelists: Eduard Alpin; Michael Doyle; Peter Del Prete
CONCURRENT SESSIONS

Wednesday, May 16, 8:00 a.m. – 9:15 a.m.

 заголовок C-14: Expanding Role of Actuaries in Captive Insurance

Salons H-I

This session will examine issues related to captive insurance, including the exponential growth of captives, particularly enterprise risk captives (ERCs); the expansion in the number of captive domiciles and the variety of regulatory approaches; the impact of the Protecting Americans from Tax Hikes (PATH) Act on captives; and recent court cases.

Moderator/Panelist: Robert J. Walling III
Panelist: Michael Angelina
C-24: Neural Networks — Could We Actually File One?

Salon G

This session will present enough theory for an unfamiliar audience to understand the workings and potential advantages of neural networks. The issue of model transparency will be discussed, particularly in contrast with GLMs, and options for explaining/presenting neural networks will be presented. In addition, a regulator will ruminate on what is actually required in a filed model. Do we make assumptions on this that may not be true?

Moderator/Panelist: Christopher Cooksey
Panelist: Thomas Hess
C-25: The New Fellow Perspective: Volunteering, Millennials and the Growing CAS

Salons C-D

In this roundtable-style session, the CAS New Members Committee will discuss their role in the CAS as millennials and volunteers, and will ask what CAS membership means to you. Please come to share your thoughts and ideas on the future of the CAS. New Fellows are encouraged to attend.

Moderator: Shelby Wolff
Panelists: Kimberly Guerriero; Rebecca Reich; Steven Walsh

C-26: Our Aging Infrastructure — A Bridge Over Troubled Water?

Salon E

The U.S has an ever-aging infrastructure. This session will explore the implications this has for the U.S. as a whole and the insurance industry specifically.

Moderator/Panelist: Brian Pallasch
Panelist: Carol Stark
C-27R: Regulatory Trends in the Age of Big Data

Salon F

Repeated on Monday, May 14, 3:15 p.m. – 4:30 p.m.

Join this session to learn the latest regulatory challenges and trends. See how insurers can navigate the regulatory landscape given the emphasis on big data insights and analytics.

Moderator/Panelist: Robert Curry
Panelists: Dorothy Andrews; James Weiss

C-34: Asia: Opportunity Knocks for P&C Actuaries

Salons J-K

Across Asia, property/casualty actuaries are playing increasingly visible roles in pricing, loss reserving, and capital management -- and the demand for experienced P/C actuaries is outpacing the supply. Could this be opportunity knocking on your door? We will discuss the types of opportunities that are becoming available, and what it is like to live and work in some of the vibrant cities of Asia. Please also attend the companion session on Tuesday, “Livin’ the Dream in Asia.”

Moderator: Bob Conger
Panelists: Syuhada Nurazmi; Victor Li; Junhua Qin

Salons A-B

(Part 3 in a series)

This intermediate session is aimed at ERM professionals who want a deeper understanding of spectral risk measures (a.k.a. distortion or dual utility risk measures) — what they are, how they work and how to use them. It will build on the elementary session in several ways. First, several families of parametric spectral measures will be introduced, motivated and explored in more detail. Second, a financial view of risk will translate between insurance and financial language and explore the link between risk charges and cost of capital (ROE).

Recommended: Bring your laptop so you can really dig in. If you don’t have one, we will still have everything on screen for you to follow.

Moderator/Panelist: Donald Mango

Panelists: John Major; Stephen Mildenhall; Jesse Nickerson
LL-2: Material Adverse Reserve Development: When is it Professional Negligence? When is it Just That Stuff Happens?

Suffolk

Join us in an interactive audience participation session where panelists illustrate a real-life but disguised case study where the audience will be asked to evaluate a specific series of circumstances: An Appointed Actuary reserve review is deemed in hindsight to be materially deficient some years later. Discussions will consider our professional code of conduct, actuarial standards of practice and best practices in reserve analysis and disclosures.

Moderator/Panelist: Robert Wolf
Panelist: Mary Frances Miller
GENERAL SESSION 4

- Wednesday, May 16, 9:45 a.m. – 11:30 a.m.

- 🎤 🎤 GS-4: Digital Disruption 🎤

**Salons E-G**

This session will take a first pass at an actuarial profession SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats). We will discuss the strengths and weaknesses of the actuarial profession in light of these changes, as well as the threats to both our current employers and to the actuary’s roles in these evolving insurers. We will also discuss opportunities for actuaries to help lead our industry forward in these challenging and exciting times.

**Moderator/Panelist:** Donald Mango

**Panelists:** Eric Boyum; Sam Friedman