2018 FMA Conference on Derivatives & Volatility

Friday, 9 November 2018
Cboe Global Markets
Chicago, IL

Join the conversation on social media using the hashtag #FMAatCboe.

www.FMA.org/2018-Derivatives-Conference
Welcome to the 2018 FMA Cboe Conference!

Welcome to the third annual Conference on Derivatives and Volatility, co-sponsored by Cboe Global Markets and the Financial Management Association International. This year's program is complete with a number of timely papers, a Cboe Research Department market update and presentation, and Dr. Torben Andersen's Keynote Address. We hope you will find something on the program that is especially interesting to you.

Nearly 100 papers were submitted for the program, of which only 5 were accepted.

Cboe Global Markets, Inc. (Cboe) is one of the world's largest exchange holding companies, offering cutting-edge trading and investment solutions to investors around the world. Cboe offers trading across a diverse range of products in multiple asset classes and geographies, including options, futures, U.S. and European equities, exchange-traded products (ETPs), global foreign exchange (FX), and multi-asset volatility products. Our trading venues include the largest options exchange in the U.S. and the largest stock exchange by value traded in Europe. In addition, the company is the second-largest stock exchange operator in the U.S. and a leading market globally for ETP trading.

Cboe is home to the Cboe Volatility Index (VIX Index), the world's barometer for equity market volatility; the Cboe ETF Marketplace, the fastest growing listing venue for issuers; Cboe BXTR, the largest trade reporting facility in Europe; Cboe Livevol, a leading provider of options technology, trading analytics and market data services; Cboe Vest, an asset management company specializing in target-outcome investment strategies; Cboe Risk Management Conferences (RMC), the premier financial industry forums on derivatives and volatility products; the Cboe Options Institute, the company's world-renowned education arm; and ETF.com, a leading provider of ETF news, data and analysis.

The Financial Management Association International (FMA) was established in 1970 to foster development in the field of finance with particular emphasis on financial management. Although the early emphasis was on financial management, FMA also serves those in the profession who conduct research, practice, and/or teach in all areas of finance including investments, markets and institutions, derivatives and risk management, international finance, and behavioral finance. This broader agenda is especially evident at FMA's conferences in North America, Europe, and Asia, and Latin America. FMA is a unique organization in many ways, in part due to our joint commitment to both quality and inclusiveness. In the past 40+ years, FMA has strived to do more to encourage research of the highest quality without abandoning inclusiveness. Among other things, FMA's concept of inclusiveness encompasses providing the opportunity – by means of a fair and open process – for people of differing interests and needs to participate in presenting and discussing research.

Bryan Kelly, Professor of Finance, Yale University
Russell Rhoads, Head of Derivatives Research, TABB Group

2018 Program Co-Chairs
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Thank you for your generous support

Cboe

Conference Sponsor
Registration Desk Hours

**Friday, 9 November, 8:00 AM – 9:30 AM**
Registration Desk located on 4th floor, Auditorium Entrance

Networking Events

**Breakfast**

**Friday, 9 November**
8:00 AM – 8:45 AM
4th floor, Auditorium Entrance

**Luncheon**

**Friday, 9 November**
12:00 PM – 1:00 PM
Cafeteria, 4th floor

**Coffee Breaks**

**Friday, 9 November**
4th floor
11:00 AM – 11:15 AM and 2:45 PM – 3:00 PM
# Full Program and Sessions

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<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tr>
<td>8:00 AM – 8:45 AM</td>
<td>Breakfast</td>
<td>4th floor</td>
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<tr>
<td>9:00 AM – 9:30 AM</td>
<td>Trading Floor Tours</td>
<td>4th floor</td>
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<tr>
<td>9:30 AM – 10:15 AM</td>
<td>Session 1: Related Securities and the Cross-Section of Stock Return Momentum: Evidence from Credit Default Swaps (CDS)</td>
<td>4th floor Auditorium</td>
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<tr>
<td></td>
<td>Jongsu Lee, University of Florida</td>
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<td>Andy Naranjo, University of Florida</td>
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<td>Stace Sirmans, Auburn University</td>
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<td></td>
<td>Presenter: Stace Sirmans, Auburn University</td>
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<td>Discussant: Alex Chinco, University of Illinois</td>
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<tr>
<td>10:15 AM – 11:00 AM</td>
<td>Session 2: How Do Investors Perceive the Risks from Macroeconomic and Financial Uncertainty? Evidence from 19 Options Markets</td>
<td>4th floor Auditorium</td>
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<td></td>
<td>Ian Dew-Becker, Northwestern University</td>
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<td>Stefano Giglio, Yale University</td>
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<td></td>
<td>Bryan Kelly, Yale University</td>
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<tr>
<td></td>
<td>Presenter: Ian Dew-Becker, Northwestern University</td>
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<td>Discussant: Andrea Vedolin, Boston University</td>
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<tr>
<td>11:00 AM – 11:15 AM</td>
<td>Coffee Break</td>
<td>4th floor</td>
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11:15 AM – 12:00 PM

Cboe Research Team Presentations/Market Update
Location: 4th floor Auditorium

12:00 PM – 1:00 PM

Luncheon & Keynote Address
Location: 4th floor Cafeteria

1:00 PM – 2:00 PM

Keynote Address
“The Pricing of Tail Risk and the Equity Premium across the Globe”

Torben Andersen
Nathan S. and Mary P. Sharp Professor of Finance
Director of the International Business & Markets Program and Research Center
Northwestern University

Torben G. Andersen is the Nathan S. and Mary P. Sharp Professor of Finance. He joined the faculty in 1991 and is a Faculty Research Associate of the National Bureau of Economic Research (NBER) and an International Fellow of the Center for Research in Econometric Analysis of Economic Time Series (CREATES) in Aarhus, Denmark. In addition, Professor Andersen was elected Fellow of the Econometric Society in 2008 and Fellow of the Society for Financial Econometrics, SoFiE, in 2013. He served as Chair of the Finance Department for the period 2015-2017.

Professor Andersen has published widely in asset pricing, empirical finance, and empirical market microstructure. His work centers on the modeling of volatility fluctuations in financial returns with applications to asset and derivatives pricing, portfolio selection, and the term structure of interest rates. His current work explores the use of large sets of high-frequency data for volatility forecasting, portfolio choice and risk management.

2:00 PM – 2:45 PM

Session 3: Liquidity Creation as Volatility Risk
Location: 4th floor Auditorium

Itamar Drechsler, New York University and NBER
Alan Moreira, University of Rochester
Alexi Savov, New York University and NBER

Presenter: Alan Moreira, University of Rochester
Discussant: Yunzhi Hu, University of North Carolina – Chapel Hill
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<tr>
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<td>2:45 PM – 3:00 PM</td>
<td>Coffee Break</td>
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<td>3:00 PM – 3:45 PM</td>
<td>Session 4: Sovereign Credit Risk and Exchange Rates: Evidence from CDS Quanto Spreads</td>
<td>4th floor Auditorium</td>
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<tr>
<td></td>
<td>Presented by Patrick Augustin, McGill University</td>
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<td></td>
<td>Mikhail Chernov, UCLA, NBER, &amp; CEPR</td>
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<td>Dongho Song, Boston College</td>
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<td>Discussant: Eben Lazarus, MIT</td>
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<td>3:45 PM – 4:30 PM</td>
<td>Session 5: OTC Intermediaries</td>
<td>4th floor Auditorium</td>
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<td></td>
<td>Presented by Bernhard Herskovic, UCLA</td>
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<td>Sriram Rajan, Office of Financial Research, US Department of the Treasury</td>
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<td>Emil Siriwardane, Harvard Business School</td>
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<td>Discussant: Brian Weller, Duke University</td>
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## Participant Index

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<tr>
<td>Torben Andersen</td>
<td>Northwestern University</td>
<td>Keynote</td>
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<tr>
<td>Patrick Augustin</td>
<td>McGill University</td>
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<tr>
<td>Alex Chinco</td>
<td>University of Illinois</td>
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<tr>
<td>Ian Dew-Becker</td>
<td>Northwestern University</td>
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<tr>
<td>Bernard Herskovic</td>
<td>UCLA</td>
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<td>Yunzhi Hu</td>
<td>UNC – Chapel Hill</td>
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<tr>
<td>Bryan Kelly</td>
<td>Yale University</td>
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<tr>
<td>Eben Lazarus</td>
<td>MIT</td>
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<td>Alan Moreira</td>
<td>University of Rochester</td>
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<tr>
<td>Russell Rhoads</td>
<td>TABB Group</td>
<td>Opening remarks</td>
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<tr>
<td>Stace Sirmans</td>
<td>Auburn University</td>
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<tr>
<td>Andrea Vedolin</td>
<td>Boston University</td>
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<tr>
<td>Brian Weller</td>
<td>Duke University</td>
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## Attendees

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<tr>
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<th>First Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Agrawal</td>
<td>Sangamitra</td>
<td>Loyola University Chicago</td>
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<tr>
<td>Alfaryan</td>
<td>Abdulrahman</td>
<td>University of Dallas</td>
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<tr>
<td>Andersen</td>
<td>Torben</td>
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<td>Augustin</td>
<td>Patrick</td>
<td>McGill University</td>
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<td>Chinco</td>
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<tr>
<td>Dew-Becker</td>
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<td>Dunbar</td>
<td>Kwamie</td>
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<td>Harwood</td>
<td>Vance</td>
<td>Six Figure Investing</td>
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<tr>
<td>Herskovic</td>
<td>Bernard</td>
<td>UCLA</td>
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<tr>
<td>Hong</td>
<td>Lu</td>
<td>Loyola University Chicago</td>
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<td>Hu</td>
<td>Yunzhi</td>
<td>UNC – Chapel Hill</td>
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<td>Jacobs</td>
<td>Thomas</td>
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<td>Kelly</td>
<td>Bryan</td>
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<tr>
<td>Lazarus</td>
<td>Eben</td>
<td>MIT</td>
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<tr>
<td>Lee</td>
<td>Sukhun</td>
<td>Loyola University Chicago</td>
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<td>Lin</td>
<td>Huidi</td>
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<tr>
<td>Lui</td>
<td>Michelle</td>
<td>FMA</td>
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<td>Mashiqa</td>
<td>Vuyolweth</td>
<td>ABSA</td>
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<td>Masujima</td>
<td>Yuki</td>
<td>Bloomberg L.P.</td>
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<td>Moreira</td>
<td>Alan</td>
<td>University of Rochester</td>
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<td>Nohel</td>
<td>Tom</td>
<td>Loyola University Chicago</td>
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<td>Oyedotun</td>
<td>Ibukun</td>
<td>University of Cape Town</td>
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<td>Rhoads</td>
<td>Russell</td>
<td>TABB Group</td>
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<tr>
<td>Sazonov</td>
<td>Nikolai</td>
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<tr>
<td>Sirmans</td>
<td>Stace</td>
<td>Auburn University</td>
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<td>Stainbrook</td>
<td>Cooper</td>
<td>Ibex Investors</td>
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<tr>
<td>Todorov</td>
<td>Viktor</td>
<td>Northwestern University</td>
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<tr>
<td>Vedolin</td>
<td>Andrea</td>
<td>Boston University</td>
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<tr>
<td>Weller</td>
<td>Brian</td>
<td>Duke University</td>
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<tr>
<td>Zaffaroni</td>
<td>Paolo</td>
<td>Imperial College London</td>
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Program Committee

Co-Chairs
- Bryan Kelly, Professor of Finance, Yale University
- Russell Rhoads, Head of Derivatives Research, TABB Group

Committee Members
- Larissa Adamiec, Benedictine University
- Torben Andersen, Northwestern University
- Turan Bali, Georgetown University
- Nina Boyarchenko, Federal Reserve Bank of New York
- Fousseni Chabi-Yo, University of Massachusetts – Amherst
- Ian Dew-Becker, Northwestern University
- Bjorn Eraker, University of Wisconsin – Madison
- Peter Feldhutter, Copenhagen Business School
- Nicola Fusari, Johns Hopkins University
- Elise Gourier, Queen Mary of University of London
- Michael Halling, Stockholm School of Economics
- Steven Heston, University of Maryland
- Kris Jacobs, University of Houston
- Arati Kale, University of Texas – Arlington
- Juan Londono, Federal Reserve Board
- Asaf Manela, Washington University in St. Louis
- Seth Pruitt, Arizona State University
- Sandra Rolnicki, Illinois Institute of Technology
- Shrihari Santosh, University of Maryland
- Paul Schneider, Universita della Svizzera Italiana
- Emil Siriwardane, Harvard Business School
- Zhaogang Song, Johns Hopkins University
- Viktor Todorov, Northwestern University
- Aurelio Vasquez, ITAM
- Dacheng Xiu, University of Chicago
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Serves as the chief spokesperson for the Association
2018-19 John Graham Duke University

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Manages the financial affairs of the Association
2012-22 Andrea Heuson University of Miami

Vice President – Annual Meeting Program
Determines the type of program to be offered and selects the participants
2019 Robert Parrino University of Texas
2020 Reena Aggarwal Georgetown University

Vice President – Financial Education
Responsible for developing and administering financial education activities including the development of sessions on financial education for the Annual Meeting program
2018-20 Betty Simkins Oklahoma State University

Vice President – Practitioner Services
Responsible for enhancing the value of practitioner membership and promoting interaction between practitioners and academicians
2017-20 Amy Edwards US SEC

Vice President – Global Services
Responsible for developing and administering activities to globalize the Association
2017-19 Iftekhar Hasan Fordham University

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Oversees the operation of the Student Chapters’ program and represents the interests of FMA’s student members
2018-21 Rustin Yerkes Samford University

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Responsible for representing the needs of FMA’s academic members and are members of the Nominating Committee
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2018-20 Murillo Campello Cornell University
2018-20 Diane Del Guercio University of Oregon
2018-20 Veronika Pool Indiana University
At-Large Regional Academic Director
2017-19 Tim Loughran University of Notre Dame
Asian/Oceania Academic Director
2017-19 Joseph Fan Chinese University of Hong Kong
European Academic Director
2017-19 Francesca Cornelli London Business School

Program Co-Chairs – FMA European Conference
(Glasgow, Scotland)
2019 James Linck Southern Methodist Univ.
Andrew Marshall University of Strathclyde
Lalitha Naveen Temple University

Program Co-Chairs – FMA Asia/Pacific Conference
(Ho Chi Minh City, Vietnam)
2019 Le Vinh Danh Ton Duc Thang University
Rajesh Narayanan Louisiana State University
Andrei Simonov Michigan State University

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Responsible for their editorial staff and for the contents of their respective publications

Financial Management
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Utpal Bhattacharya HKUST
Editors
Bing Han University of Toronto
Rajkamal Iyer Imperial College London

FMA Survey and Synthesis Series
2016-19 Laura Starks University of Texas Austin

FMA Online
2012-19 Jacqueline Garner Georgia Inst of Technology

Publications Committee Chairperson
2016-19 Jonathan Karpoff University of Washington

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Represent the interests of FMA’s practitioner members
2018-20 W. Scott Frame Fed. Reserve Bank - Atlanta
2018-20 Mark Kritzman Windham Capital Management
2018-20 P. Raghavendra Rau University of Cambridge
2017-19 Recap Bildik Borsa Istanbul
2017-19 Anil Shivdasani UNC – Chapel Hill
2017-19 Larry Wall Federal Reserve Bank of Atlanta

FMA Board of Trustees
Responsible for insuring the long-term continuity of the Association and have the authority to approve appointments or any other matter which appears to affect the basic structure or operation of the Association
2013-20 Franklin Allen Imperial College London
2017-24 Brad Barber UC Davis
2017-24 William Christie* Vanderbilt University
2016-23 David Denis University of Pittsburgh
2014-21 Kose John New York University
2012-19 G. Andrew Karolyi Cornell University
2018-23 Kai Li Univ. of British Columbia
2014-19 Ajay Patel Wake Forest University
2015-22 Jay Ritter University of Florida

* Chairperson

All terms of office begin at the end of the Annual Meeting in the first indicated year (e.g. 2018 in 2018-20) and end at the conclusion of the Annual Meeting in the second indicated year (e.g. 2020 in 2018-20).
Now accepting submissions

2019 FMA Applied Finance Conference
17 May 2019 | New York, NY

Submissions Due: Friday, 4 January 2019

FMA seeks high-quality papers from scholars & practitioners in the fields of finance & accounting that:

Informs practice and advance the frontiers of academic research in directions relevant to practice.

Addresses issues that are relevant to contemporary issues globally and for policy formation and assessment.

Introduces new hypotheses that have the potential to stimulate additional research.

Learn more at www.FMA.org/AFC2019

Upcoming Conferences

2019 FMA Consortium on Factor Investing
4 February 2019 | Cambridge, England
www.FMA.org/Investing-Consortium

2019 FMA Wine Country Finance Conference
29 - 30 March 2019 | Sonoma Valley, CA
Paper Submissions: 19 November 2018
www.FMA.org/2019-Wine-Country-Conference

2019 FMA Applied Finance Conference
17 May 2019 | New York, NY
Paper Submissions: 4 January 2019
www.FMA.org/AFC2019

2019 FMA Global Conference in Latin America
22 - 24 May 2019 | Bogotá, Colombia
DSC Applications: 4 January 2019
www.FMA.org/Bogota

2019 FMA European Conference
12 - 14 June 2019 | Glasgow, Scotland
Paper Submissions: 3 December 2018
DSC Applications: 15 February 2019
www.FMA.org/Glasgow

2019 FMA Asia/Pacific Conference
10 - 12 July 2019 | Ho Chi Minh City, Vietnam
Paper Submissions: 17 December 2018
DSC Applications: 22 February 2019
www.FMA.org/Vietnam

2019 FMA Annual Meeting
23 - 26 October 2019 | New Orleans, LA
Paper Submissions: 15 January 2019
DSC Applications: 3 May 2019
www.FMA.org/New-Orleans

*DSC = Doctoral Student Consortium