

2017

**Conference on Derivatives and Volatility
9 - 10 November 2017
Cboe Options Exchange
400 South LaSalle Street, Chicago, IL**

Conference Program

#FMAatCBOE

During the conference, use the hashtag #FMAatCBOE to follow the conversation on Twitter (@finmgmtassoc) and Facebook (www.facebook.com/FMA.org).



www.FMA.org/CBOE2017

Welcome to the 2017 FMA Conference on Derivatives and Volatility!

Dear Colleagues:

Welcome to the second annual conference on derivatives and volatility, co-sponsored by Cboe Options Exchange and the Financial Management Association International. This year's program is complete with a number of timely papers, a Cboe Research Department presentation, and Peter Carr's Keynote Address. We hope you will find something on the program that is especially interesting to you.

Over 100 papers were submitted for the program, of which only 6% were accepted.

Cboe Global Markets 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. 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.

Regards,

Bryan Kelly, Professor of Finance and Robert King Steel Faculty Fellow, Booth School of Business,
University of Chicago

Russell Rhoads, CFA, Director of Education, Cboe Global Markets
2017 FMA Conference on Derivatives and Volatility Co-Chairs

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Registration Desk Hours

Thursday, 9 November, 1:00 – 2:00 PM

Registration Desk located on 4th floor, Auditorium Entrance

Friday, 10 November, 8:00 AM – 8:45 AM

Registration Desk located on 4th floor, Auditorium Entrance

Social Events

Reception

Thursday, 9 November

5:00 PM – 7:00 PM

Members' Lounge – 4th Floor

Breakfast

Friday, 10 November

8:00 AM – 8:45 AM

Members' Lounge – 4th Floor

Luncheon

Friday, 10 November

12:00 – 1:00PM

Members' Lounge, 4th floor

Coffee Breaks

Thursday, 9 November

3:45 – 4:00 PM

Auditorium Entrance, 4th floor



Friday, 10 November

11:00 – 11:15 AM, 3:00 – 3:15 PM


Auditorium Entrance, 4th floor

Full Program and Sessions

Thursday, 9 November 2017

Thursday, 9 November, 2:00 PM – 2:45 PM	
Opening Remarks and Cboe Market Update Russell Rhoads, Cboe Global Markets	Location: Auditorium
Thursday, 9 November, 2:45 PM – 3:45 PM	
Session I: Credit and Option Risk Premia <i>Lars Kuehn, Carnegie Mellon University</i> David Schreindorfer, Arizona State University Florian Schulz, University of Washington Presenter: Lars Kuehn, Carnegie Mellon University Discussant: Hui Chen, MIT	Location: Auditorium
Thursday, 9 November, 3:45 PM – 4:00 PM	
Coffee Break Location: 4 th floor	
	
Thursday, 9 November, 4:00 PM – 5:00 PM	
Session 2: Variance Risk Premia on Stocks and Bonds <i>Paul Whelan, Copenhagen Business School</i> Phillippe Mueller, London School of Economics Andrea Devolin, London School of Economics Petar Sabtchevsky, London School of Economics Presenter: Paul Whelan, Copenhagen Business School Discussant: Ian Dew-Becker, Northwestern University	Location: Auditorium
Thursday, 9 November, 5:00 PM – 7:00 PM	
Opening Reception Location: Members' Lounge, 4 th floor	
	

Friday, 10 November 2017

Friday, 10 November, 8:45 AM – 9:00 AM	
Opening Remarks Bryan Kelly, University of Chicago	Location: Auditorium
Friday, 10 November, 9:00 AM – 10:00 AM	
Session 3: Nonparametric Option-Implied Volatility <i>Viktor Todorov, Northwestern University</i> Presenter: Viktor Todorov Discussant: Dacheng Xiu, University of Chicago	Location: Auditorium
Friday, 10 November, 10:00 AM – 11:00 AM	
Session 4: Idiosyncratic Jump Risk Matters: Evidence from Equity Returns and Options Jean-Francois Begin, Simon Fraser University <i>Christian Dorion, HEC Montreal</i> Genevieve Gauthier, HEC Montreal Presenter: Christian Dorion, HEC Montreal Discussant: Bjorn Eraker, University of Wisconsin	Location: Auditorium
Friday, 10 November, 11:00 AM – 11:15 AM	
Coffee Break Location: 4 th floor	
	
Friday, 10 November, 11:15 AM – 12:00 PM	
Cboe Research Department Presentation	Location: Auditorium

Program continues on the next page.

Friday, 10 November, 12:00 PM – 1:00 PM

Luncheon

Location: Members' Lounge



Friday, 10 November, 1:00 PM – 2:00 PM

Keynote Address

Location: Auditorium

Peter Carr

**Department Chair of Finance and Risk Engineering
New York University Tandon School of Engineering**



Dr. Peter Carr is the Chair of the Finance and Risk Engineering Department at NYU Tandon School of Engineering. He has headed various quant groups in the financial industry for the last twenty years. He also presently serves as a trustee for the National Museum of Mathematics and WorldQuant University. Prior to joining the financial industry, Dr. Carr was a finance professor for 8 years at Cornell University, after obtaining his Ph.D. from UCLA in 1989. He has over 85 publications in academic and industry-oriented journals and serves as an associate editor for 8 journals related to mathematical finance. He was selected as Quant of the Year by Risk Magazine in 2003 and Financial Engineer of the Year by IAQF/Sungard in 2010. From 2011 to 2014, Dr. Carr was included in Institutional Investor's Tech 50, an annual listing of the 50 most influential people in financial technology.

Friday, 10 November, 2:00 PM – 3:00 PM

Session 5: Recovering the Variance Premium

Location: Auditorium

Steve Heston, University of Maryland

Presenter: Steve Heston, University of Maryland
Discussant: Jaroslav Borovicka, New York University

Friday, 10 November, 3:00 PM – 3:15 PM

Coffee Break

Location: 4th floor



Program continues on the next page.

Friday, 10 November, 3:15 PM – 4:15PM

Session 6: When the Options Market Disagrees

Location: Auditorium

Ruslan Goyenko, McGill University
Mathieu Fournier, HEC Montreal
Gunnar Grass, HEC Montreal

Presenter: Ruslan Goyenko, McGill University
Discussant: Travis Johnson, University of Texas

Friday, 10 November, 4:15 PM – 4:30 PM

Best Paper Award & Closing Remarks

Location: Auditorium

Participant Index

Name	Affiliation	Session Number
Jaroslav Borovicka	New York University	3
Peter Carr	New York University	Keynote
Hui Chen	MIT	1
Ian Dew-Becker	Northwestern University	2
Christian Dorion	HEC Montreal	4
Bjorn Eraker	University of Wisconsin	4
Ruslan Goyenko	McGill University	6
Steve Heston	University of Maryland	1
Travis Johnson	University of Texas	6
Bryan Kelly	University of Chicago	Opening remarks
Lars Kuehn	Carnegie Mellon University	3
Russell Rhoads	Cboe Global Markets	Opening remarks
Viktor Todorov	Northwestern University	5
Paul Whelan	Copenhagen Business School	2
Dacheng Xiu	University of Chicago	5

Attendees

First Name	Last Name	Affiliation
Yara	Almazmomi	Sacred Heart University
Abdulaziz	Alshabnan	Sacred Heart University
Wafa	Alwafi	Sacred Heart University
Torben	Andersen	Northwestern University
Jaroslav	Borovicka	New York University
Peter	Carr	New York University
Joe	Cary	Parkwood LLC
Hui	Chen	MIT
YiYing	Cheng	University of St. Thomas Houston
Christian	Conrad	Heidelberg University
Charles	Conrick IV	Dickinson State University
Ian	Dew-Becker	Northwestern University
Erik	Doeff	Chicago Trading Company
Christian	Dorion	HEC Montreal
Jian	Du	CME Group
Bjorn	Eraker	University of Wisconsin
Alex	Furger	Transmarket Group
Kennan	Gao	Federal Reserve Bank of Minneapolis
Ruslan	Goyenko	McGill University
Scott	Hanson	Dickinson State University
Steve	Heston	University of Maryland
Travis	Johnson	University of Texas
Iksu	Jurn	Saginaw Valley State University
Bryan	Kelly	University of Chicago
Dong	Kim	Ohio Northern University
Jonchai	Kim	Mississippi Valley State University
Lars	Kuehn	Carnegie Mellon University
Xi	Liu	FactSet
Michelle	Lui	FMA
Temil	Marmon	Marmon Trading
Cassandra	McKay	Fidelity Investments
Ryan	McKeon	University of San Diego
Bo	Meng	University of Iowa
Russell	Rhoads	Cboe Global Markets
Gregory	Sobczak	Chicago Trading Company
Janikan	Spanvanij	St. Cloud State University
Viktor	Todorov	Northwestern University
John	Tokarowski	Fidelity Investments
Tomonori	Uchiyama	Tokyo Metropolitan University
Paul	Whelan	Copenhagen Business School
Zhentao	Yang	FactSet
Xiaojie	Zhou	FactSet Research Systems, Inc.
Dacheng	Xiu	University of Chicago

Program Committee

Co-Chairs

- Bryan Kelly, Associate Professor of Finance and Richard N. Rosett Faculty Fellow, Booth School of Business, University of Chicago
- Russell Rhoads, CFA, Director of Education, Cboe Global Markets

Committee Members

- Larissa Adamiec, Benedictine University
- Turan Bali, Georgetown University
- Oleg Bondarenko, University of Illinois at Chicago
- Nina Boyarchenko, Federal Reserve Bank of New York
- Foussemi Chabi-Yo, Ohio State University
- Jaewon Choi, University of Illinois
- Christian Dorion, HEC Montreal
- Joost Driessen, Tilburg University
- Bjorn Eraker, University of Wisconsin
- Peter Feldhutter, London Business School
- Jean-Sebastian Fontaine, Bank of Canada
- Nicola Fusari, John Hopkins University
- Mathieu Fournier, HEC Montreal
- Elise Gourier, Queen Mary University
- Michael Halling, Stockholm School of Economics
- Bernard Herskovic, UCLA
- Kris Jacobs, University of Houston
- Aarti Kale, University of Texas at Arlington
- Sophia Zheng Li, Michigan State University
- Jingrui Li, West Virginia University
- Juan Londono, Federal Reserve Board
- Asaf Manela, Washington University in St. Louis
- Dmitriy Muravyev, Boston College
- Seth Pruitt, Arizona State University
- Sandra Rolnicki, Illinois Institute of Technology
- Alberto Rossi, University of Maryland
- Paul Schneider, Swiss Finance Institute
- Catherine Shalen, Cboe Options Exchange
- Ivan Shaliastovich, University of Wisconsin
- Emil Siriwardane, Harvard Business School
- Zhaogang Song, John
- Viktor Todorov, Northwestern University
- Fabio Trojani, University of Geneva and Swiss Finance Institute
- Aurelio Vasquez, ITAM
- Brian Weller, Duke University
- Liuren Wu, CUNY
- Dacheng Xiu, University of Chicago Booth School of Business

FINANCIAL MANAGEMENT ASSOCIATION INTERNATIONAL

OFFICERS – DIRECTORS – EDITORS – TRUSTEES

President

Serves as the chief spokesperson for the Association

2017-18 Brad Barber University of California, Davis

Secretary/Treasurer

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

2018 Ronald Masulis Univ of New South Wales

2019 Robert Parrino University of Texas

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

2016-18 Andrew Metrick Yale 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 & Bank of Finland

Student Chapters Committee Chairperson

Oversees the operation of the Student Chapters' program and represents the interests of FMA's student members

2012-18 Ross Dickens Univ of Tennessee Martin

Academic Directors

Responsible for representing the needs of FMA's academic members and are members of the Nominating Committee

At-Large Academic Directors

2016-18 Simi Kedia Rutgers University

2016-18 Darius Miller Southern Methodist University

2016-18 Gregory Udell 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 (Kristiansand, Norway)

2018 Lars Oxelheim University of Agder and Lund University

Annette Poulsen University of Georgia

Program Co-Chairs – FMA Asia/Pacific Conference (Hong Kong)

2018 CS Agnes Cheng HKUST

Kai Li University of British Columbia

Christian Lundblad UNC Chapel Hill

Editors

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

Financial Management

2016-19 Executive Editor
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

Practitioner Directors

Represent the interests of FMA's practitioner members

2016-18 Scott Bauguess US SEC

2016-18 Amy Edwards US SEC

2016-18 Kathleen Weiss Hanley Lehigh University

2017-19 Recep Bildik Borsa Istanbul

2017-19 Anil Shivdasani University of North Carolina

2017-19 Marc Zenner 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 William Christie* Vanderbilt University

2016-23 David Denis University of Pittsburgh

2009-18 Robert Harris University of Virginia

2014-21 Kose John New York University

2012-19 G. Andrew Karolyi Cornell University

2014-19 Ajay Patel Wake Forest University

2015-22 Jay Ritter University of Florida

2011-18 Anthony Saunders New York University

* Chairperson

All terms of office begin at the end of the Annual Meeting in the first indicated year (e.g. 2016 in 2016-18) and end at the conclusion of the Annual Meeting in the second indicated year (e.g. 2018 in 2016-18).



The Gold Standard in Options Education

The Options Institute, now in its 30th year, continues to set the bar for investor education worldwide. With deep expertise, tools and interactive resources, our world-renowned center can help novice and advanced investors alike more effectively use options and volatility strategies to manage risk and achieve their goals. Ultimately, we empower investors with precise and flexible means to achieve their targeted outcomes.

Delivering customized programs for *Active Learners*

- **Full range of programs:** our custom programs cover all levels of options trading - from basic options fundamentals, to trading complex strategies, to managing client positions.
- **Our innovative approach:** experienced trading professionals bring our *Active Learning* philosophy to life. Their focus is to help you practically apply your knowledge, whether you seek to mitigate risk, generate income, manage volatility or safeguard your capital.
- **Dynamic quality curriculum:** we introduce new concepts and competencies at the right stage, while also maintaining the right balance of theory, strategy and hands-on simulations.

Dedicated to Investor Education Globally

The Options Institute continues to grow and lead the way for greater understanding of options products in an increasingly global marketplace. Our experienced instructors collaborate with institutions and exchanges worldwide, including:

- Educational Consulting
- Locally Tailored Programming
- Educational Forums

Global Initiatives

The Options Institute continues to grow and lead the way for greater understanding of options and volatility strategies to manage risk in an increasingly global marketplace. Our experienced instructors collaborate with institutions and exchanges worldwide, including:

- **Educational Consulting:** We help local exchanges and market participants navigate the use of options in their markets, while also providing appropriately tailored educational materials and instructor training. Recent efforts have focused on the large growth opportunities in Asia, partnering with:
 - The Singapore Exchange (SGX)
 - China Financial Futures Exchange (CFFEX)
- **Locally Tailored Programs:** Thousands of investors from around the world visit The Options Institute annually to participate in programs that are designed around their specific needs.
- **Educational Forums:** Our experienced instructors participate in educational forums in leading financial centers such as London and Singapore.

The VIX Network: Promoting the Power of Trading Volatility

- Cboe and Standard and Poor's are lead partners in the VIX Network - a collaborative initiative to provide advanced instruction and materials to exchanges participating in the rapid growth of volatility as a tradable asset.

Notes

Upcoming Conferences & Call for Papers

2018 Consortium on Trading Strategies and Institutional Investing

6 February 2018 | Cambridge, England
www.FMA.org/2018-Trading-Strategies

2018 Napa Conference on Financial Markets Research

23 - 24 March 2018 | Napa Valley, CA
Submission Deadline: 20 November 2017
www.FMA.org/Napa2017

2018 Applied Finance Conference

11 May 2018 | New York, NY
Submission Deadline: 5 January 2018
www.FMA.org/AFC2017

2018 Asia/Pacific Conference*

16 - 18 May 2018 | Hong Kong
Submission Deadline: 17 November 2017
DSC Application Due: 9 February 2018
www.FMA.org/Hong-Kong

2018 European Conference*

13 - 15 June 2018 | Kristiansand, Norway
Submission Deadline: 1 December 2017
DSC Application Due: 16 February 2018
www.FMA.org/Norway

2018 Annual Meeting*

10 - 13 October 2018
San Diego, California | Hilton San Diego Bayfront
More information coming soon.
www.FMA.org/San-Diego

*Conference includes a Doctoral Student Consortium (DSC) for advance doctoral students.

Looking for more?

Explore more on topics, such as Corporate Finance, Banking, Investments, by logging into the **FMA Members' Only** section.

- How Costly is Forced Gender-Balancing of Corporate Boards?
B. Espen Eckbo, Dartmouth College
- The Learning Approach to Corporate Governance
Michael Weisbach, The Ohio State University
- Commodity Pricing Models
Eduardo Schwartz, UCLA
- And, many more!



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