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Welcome

We are delighted to welcome you to the Cambridge Centre for Alternative Finance (CCAF) Inaugural Annual Conference *Mapping the Landscape of Alternative Finance* which brings together industry leaders, academics and regulators from around the world.

The first of its kind, this conference will focus on the continuously evolving global alternative finance landscape and will highlight several milestones for the CCAF:

- This is the first in a planned series of annual conferences and we are proud to highlight a diverse global attendee mix and a strong line up of expert speakers.
- The conference will provide a platform to discuss prominent research themes relating to the
  evolution of the alternative finance landscape and to disseminate the results from the first of
  its kind, global benchmarking study.
- This conference capitalises on both industry and academic knowledge, presenting a hybrid programme designed to enable top-level learning, engagement, and exploration of one of the most rapidly growing sectors of the global financial industry.

The 2016 conference theme, *Mapping the Landscape of Alternative Finance*, reflects the evolutionary state and growing global impact of a fascinating industry. The conference gives us the chance to push the boundaries of academic research, scope research areas, define concepts, hone methodologies and establish working taxonomies whilst we collaboratively begin to map the industry's growth trajectory.

The conference is structured around four sessions, three of which focus on the CCAF's main research streams – Online Channels, Credit Analytics and Payment Systems – whilst the fourth looks at Regulation and Policy. In Session 1, The Evolution and Development of Online Channels of Finance in Global Regions, the presenters and discussant Professor Thorsten Beck will make sense of the evolving and fluid landscape of alternative finance as depicted by our empirical studies. They will aim to identify, scope and map the patterns of development and the emerging market trends to explore the fundamental drivers that propel the growth of alternative finance, as well as to elucidate some of the barriers and challenges for growth and the potential pitfalls.

Investment and Credit Analytics Using New Forms of Data, Session 2, discusses research using new forms of data being explored by researchers that have relevance for the world of finance. This time the presenters and discussant, Associate **Professor Rajkamal Iyer**, will explore: the digitalization of social and commercial engagement that is producing new forms of data, some of which offers finance providers the opportunity to increase the predictive power of investment and credit analytics.

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Session 3, Cryptocurrency and Blockchain Technology, chaired by Professor David Yermack, will explore some of the motivations, opportunities and obstacles for public sector institutions interested in distributed ledger technology (DLT). The presenters will also examine the many interesting areas beyond payments where distributed ledgers are already being employed and will conclude by exploring the question of timing.

In Session 4, Regulation and Policy, Baroness Susan Kramer will chair a stimulating and lively panel discussion exploring regulatory development in alternative finance across various geographical jurisdictions. Ultimately trying to answer: to what extent can regulation and policy making be a hindrance or a catalyst in the advancement of alternative finance in countries or regions?

We would like to thank CME Group Foundation and Visa Europe Collab for their financial support of the conference and the Centre's research.

## **Robert Wardrop**

Executive Director
Cambridge Centre for Alternative Finance

## Raghavendra (Raghu) Rau

Sir Evelyn de Rothschild Professor of Finance Cambridge Judge Business School Director (Research) Cambridge Centre for Alternative Finance

## **Bryan Zheng Zhang**

Director (Policy and Operations)
Cambridge Centre for Alternative Finance

About the conference organisers

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Since 1990, Cambridge Judge Business School has forged a reputation as a centre of rigorous thinking and high-impact transformative education. Situated within one of the world's most prestigious research universities, it is in the heart of the Cambridge Cluster, the most successful technology entrepreneurship cluster in Europe.

The School works with every student and organisation at a deep level, identifying important problems and questions, challenging and coaching people to find answers, and creating new knowledge.

The **Cambridge Centre for Alternative Finance (CCAF)** is a research institute established within Cambridge Judge Business School, University of Cambridge.

The CCAF conducts research across three broad, yet interconnected, research streams:

- I. Online Channels and Instruments including crowdfunding and peer-to-peer lending
- II. Credit Analytics and new forms of data analytics to inform credit decision-making
- III. Payments Systems and distributed ledger technology

CCAF is an internationally renowned centre of excellence, noted for its pioneering research in alternative finance. CCAF's benchmarking and industry reports are widely recognised as the most reliable, independent and comprehensive sources of information and market data in crowdfunding, peer-to-peer lending and other forms of alternative finance.

CCAF's research is made freely available to policymakers, regulators, industry practitioners, academia and the wider public via the CCAF website: www.jbs.cam.uk/ccaf

Since its inception in January 2015, the CCAF's funding has come from corporate donations, sponsored work, and contract work. We are an academic institute within the University of Cambridge and adhere to the principle of academic independence, while following stringent research ethic guidelines.

The CCAF has unparalleled capacity and reputation in the field of alternative finance, evidenced by the depth and breadth of its data depository, and its policy and media impact:

- I. Data The CCAF has the world's largest data depository in alternative finance, with market data gathered from 1,200 + alternative finance platforms from across the Asia-Pacific region, the Americas, Europe, Africa and the Middle East. The Centre has also collected survey data from over 15,600 users of alternative finance and a granular-level transactional database of 25 million micro-transactions totalling £1.2 billion.
- II. **Policy Impact** The CCAF has engaged and is widely cited by a plethora of regulators and policymakers including: the FCA, HMT, the European Commission, the World Bank, IDB, Bank of England, Hong Kong Monetary Authority, Singapore Monetary Authority, Malaysia Securities Commission, DFID-FSD, Kenya CMA, Uganda CMA, Rwanda CMA, Tanzania CMA, British Business Bank, BIS and the Cabinet Office.
- III. **Press and Media** The CCAF has been extensively covered in the media, including: the *Financial Times, Reuters, BBC, CNBC, The Economist, The Guardian, Bloomberg, The Times, The Independent, City A.M., Wired, Le Monde, Les Echos, Forbes, Der Spiegel,* the *Daily Telegraph* and the *Sunday Times*.

For information about the Cambridge Centre for Alternative Finance and the opportunities to collaborate in its research programmes, please contact:

**Robert Wardrop** Executive Director, Cambridge Centre for Alternative Finance **r.wardrop@jbs.cam.ac.uk** 

6 Conference agenda

Welcome Session 1: The Evolution and Development of Online Channels of Finance in
Session 1: The Evolution and Development of Online Channels of Finance in
Global Regions
Rolf Hickmann Research Fellow Cambridge Centre of Alternative Finance, Cambridge
Judge Business School, University of Cambridge and Founder pH Group
Professor Giancarlo Giudici Associate Professor Corporate of Finance,
Politecnico di Milano
Professor Raghavendra Rau Sir Evelyn de Rothschild Professor of Finance and Director
(Research) Cambridge Centre for Alternative Finance, Cambridge Judge Business School,
University of Cambridge
Discussant: Professor Thorsten Beck Professor of Banking and Finance,
CASS Business School City, University of London
Q&A
Mid-morning break
Session 2: Investment and Credit Analytics Using New Forms of Data
Dr Jeremy Sosabowski CEO AlgoDynamix
Desislava Hristova PhD Candidate, Computer Laboratory, University of Cambridge
Dr David Stillwell University Lecturer in Big Data Analytics & Quantitative Social Science
and Deputy Director of the Psychometrics Centre, Cambridge Judge Business School,
University of Cambridge
Discussant: Dr Rajkamal Iyer Associate Professor of Finance,
Imperial College Business School
Q&A
Lunch
Session 3: Cryptocurrency and Blockchain Technology
Dr Garrick Hileman Senior Research Associate, Cambridge Centre for Alternative Finance
Cambridge Judge Business School, University of Cambridge
Balaji Srinivasan CEO of 21.co and Board Partner Andreessen of Horowitz
Cordelia Kafetz Senior Manager, Future of Money, Bank of England
Discussant: Professor David Yermack Albert Fingerhut Professor of Finance and Business
Transformation and Chairman of the Finance Department,
New York University Stern School of Business
Q&A
Mid-afternoon break

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15:30	Session 4: Regulation and Policy
	Panel discussion
	Chair:
	Baroness Kramer House of Lords
	Panellists:
	Vladimir Ivanov Senior Financial Economist, US Securities and Exchange Commission Dr Julie Maupin Senior Research Fellow, Max Planck Institute for Comparative Public Law and International Law; and Senior Fellow, Centre for International Governance Innovation Aki Kallio Ministerial Advisor, Financial Markets Department, Ministry of Finance, Finland
16:30	Q&A
17:00	Closing session
17:30	Post conference drinks reception
18:30	Event ends

Session biographies

# Session 1: The Evolution and Development of Online Channels of Finance in Global Regions



#### **Rolf Hickmann**

Research Fellow Cambridge Centre for Alternative Finance, Cambridge Judge Business School, University of Cambridge and Founder pH Group

Rolf founded the pH Group in 1987, a specialised data-analytics consultancy that focused entirely on the business population of the UK (and several other countries); pioneering the extensive use of databases to enable a sophisticated analysis of SMEs, and in particular, the modelling of their behaviours, needs, competitive performance, likely future default, and likely future growth. The pH data, tools and models are still used by all of the top six UK commercial banks (and several in France), most of the key utilities and telco providers, several insurers, and many other organisations. The pH Group was acquired in 2007 by Experian and since 2012, Rolf has been advising firms and institutions in a personal capacity on a number of projects involving SME financing and credit analysis. He is particularly interested in research that can provide the basis for effective, new funding mechanisms for deserving SMEs (especially in times of market failure), reflecting a data-led understanding of how this population segments, and what contribution each segment makes to the economy at large, as well as in risk-adjusted returns.



Giancarlo Giudici

Associate Professor of Corporate Finance, Politecnico di Milano

Giancarlo Giudici is an Associate Professor of Corporate Finance at Politecnico di Milano, Italy and he is a member of the faculty of MIP Graduate School of Business. His research activity focuses on firms' financing, especially new listings, initial public offerings, venture capital and crowdfunding. He wrote several articles in international journals, contributed to a number of books and acted as referee for a number of journals. He is the Scientific Director of the Observatory on Mini-Bond and of the Observatory on Crowdinvesting in Italy.





### Raghavendra Rau

Sir Evelyn de Rothschild Professor of Finance and Director (Research) Cambridge Centre for Alternative Finance, Cambridge Judge Business School, University of Cambridge

Professor Rau is the Sir Evelyn de Rothschild Professor of Finance at Cambridge Judge Business School. He has taught at a number of universities around the world, including the Institut d'Etudes Politiques de Paris (Sciences PO), Purdue University, the University of California at Los Angeles and most recently, the University of California at Berkeley. He is an Editor of Financial Management, and Associate Editor of the International Review of Finance and the Quarterly Journal of Finance. His research has frequently been covered by the popular press including the New York Times, the Financial Times, the Wall Street Journal, and The Economist, among others. He won the Ig Nobel Prize in Management in 2015, a prize awarded for research that makes people laugh, and then think.



#### Thorsten Recl

Professor of Banking and Finance, CASS Business School City, University of London

Thorsten Beck is Professor of Banking and Finance at Cass Business School in London. He is also a Research Fellow of the Centre for Economic Policy Research (CEPR) and the CESifo. He was Professor of Economics from 2008 to 2014 at Tilburg University and the founding chair of the European Banking Center from 2008 to 2013. Previously he worked in the research department of the World Bank and has also worked as consultant for – among others - the European Central Bank, the BIS, the IMF, the European Commission, and the German Development Corporation. His research, academic publications and operational work have focused on two major questions: What is the relationship between finance and economic development? What policies are needed to build a sound and effective financial system? Recently, he has concentrated on access to financial services, including SME finance, as well as on the design of regulatory and bank resolution frameworks. In addition to numerous academic publications in leading economics and finance journals, he has coauthored several policy reports on access to finance, financial systems in Africa and crossborder banking. His country experience, both in operational and research work, includes Bangladesh, Bolivia, Brazil, China, Colombia, Egypt, Mexico, Russia and several countries in Sub-Saharan Africa. In addition to presentation at numerous academic conferences, including several keynote addresses, he is invited regularly to policy panels across Europe. He holds a PhD from the University of Virginia and an MA from the University of Tübingen in Germany.

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## Session 2: Investment and Credit Analytics Using New Forms of Data



## Desislava Hristova

PhD Candidate, Computer Laboratory, University of Cambridge

Desislava is a final year PhD student at the Computer Laboratory, University of Cambridge under the supervision of Professor Cecilia Mascolo. Her research focus is on geo-social networks, where human mobility and social interactions from social media data are studied in parallel to the benefit of urban development and location-based services. She has applied her research to international development initiatives at the UN, identifying gentrification processes in London neighbourhoods and is currently undertaking a project on cultural analytics as part of her internship at Bell Labs, Cambridge.



#### **David Stillwell**

University Lecturer in Big Data Analytics & Quantitative Social Science and Deputy Director of the Psychometrics Centre, Cambridge Judge Business School, University of Cambridge

Dr David Stillwell is Deputy Director of Cambridge Judge Business School Psychometrics Centre, and leads the Computational Behavioural Science Unit.

In June 2007, between obtaining his first degree and embarking on his Masters, David began a personal side project designing applications for social networks. The result was the *myPersonality* Facebook application that allows users to take real psychometric tests and receive feedback on their results. Today *myPersonality* has collected data from more than six million people and the resulting database has become a priceless academic resource used by numerous researchers all over the world.

Since these early successes, the influence of David's work has expanded considerably, so that today its impact ranges from targeted online advertising, psychometric adaptive test development, ipsative techniques in test design, the real-time analysis of online digital footprints, behavioural prediction and state-of-the-art school examinations.



Jeremy Sosabowski CEO of AlgoDynamix

Jeremy is the CEO of AlgoDynamix, a deep data software risk analytics company focusing on financially disruptive events. The software detects anomalies in the financial markets and anticipates price movements hours (or days) in advance of the event. Unlike other solutions, the underlying risk analytics technology does not require any historical data or knowledge of previous disruptive events. Existing clients include investment banks and asset managers (managed funds, hedge funds and family offices). The company is backed by institutional investors including Amadeus Capital Partners and was recently nominated as one of the UK's most disruptive technology companies.

Jeremy's previous roles include analyst (analytics, statistics and user profiling) at a payment processing company and CTO at a telecommunication network infrastructure company. His 'IP portfolio' includes several granted patents and more than ten peer reviewed publications. He has an undergraduate and two post graduate degrees in Engineering, including an Engineering PhD from Jesus College, University of Cambridge.



**Rajkamal lyer**Associate Professor of Finance, Imperial College Business School

Rajkamal Iyer is an Associate Professor of Finance at the Imperial College Business School. Rajkamal's research focuses on the area of banking and contract theory, with a particular interest in understanding the role of technology in financial intermediation. Iyer has worked on research papers that examine the efficiency of online credit markets. He has also testified before US house sub-committee pertaining to regulation of online credit markets. Iyer holds a BA and an MA in economics from Bombay University, an MSc in Economics and Finance from the London School of Economics, and a PhD in Finance from INSEAD.

## Session 3: Cryptocurrency and Blockchain Technology



#### **Garrick Hileman**

Senior Research Associate, Cambridge Centre for Alternative Finance, Cambridge Judge Business School, University of Cambridge

Dr Garrick Hileman is a Senior Research Associate at the Cambridge Centre for Alternative Finance and a Researcher at the Centre for Macroeconomics. He was recently ranked as one of the 100 most influential economists in the UK and Ireland and he is regularly asked to share his research and perspective with the FT, BBC, CNBC, WSJ, Sky News, and other media. Garrick has been invited to present his research on monetary and financial innovation to government organisations, including central banks and war colleges, as well as private firms such as Visa, Black Rock, and UBS. Garrick has 20 years' private sector experience with both startups and established companies such as Visa, Lloyd's of London, Bank of America, The Home Depot, and Allianz. Garrick's technology experience includes co-founding a San Francisco-based tech incubator, IT strategy consulting for multinationals, and founding MacroDigest, which employs a proprietary algorithm to cluster trending economic analysis and perspective.



Cordelia Kafetz

Senior Manager, Future of Money, Bank of England

Cordelia heads up the Future of Money team at the Bank of England. She is responsible for the Bank's research on the future of cash and on central bank digital currencies. Prior to taking up this role last year, Cordelia has 10 years of experience in banking regulation and supervision.



Balaji Srinivasan

CEO of 21.co and Board Partner at Andreessen Horowitz

Balaji S. Srinivasan is the CEO of 21.co and a Board Partner at Andreessen Horowitz. Prior to taking the role of CEO at 21.co, Dr Srinivasan was a General Partner at Andreessen Horowitz. He was named to the MIT TR35, was the cofounder and CTO of Founders Fund-backed Counsyl, and taught a MOOC with 200k students at startup.stanford.edu. He holds a BS, MS, and PhD in Electrical Engineering and an MS in Chemical Engineering from Stanford University.



**David Yermack** 

Albert Fingerhut Professor of Finance and Business Transformation and Chairman of the Finance Department, New York University Stern School of Business

David Yermack is the Albert Fingerhut Professor of Finance and Business Transformation and Chairman of the Finance Department at New York University's Stern School of Business, where he has been a member of the faculty since 1994. In 2014 he began teaching the first course at a major university on digital currencies and blockchains in the financial services industry. Professor Yermack was awarded AB (1985), MBA (1991), JD (1991), AM (1993) and PhD (1994) degrees, all from Harvard University. He has been appointed as a visiting professor at 15 international universities, a visiting scholar at the Federal Reserve Banks of New York and Philadelphia, and has given invited research seminars at more than 100 universities and institutes worldwide. He has work experience in management consulting, law, and financial journalism.

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## Session 4: Regulation and Policy, Panel Discussion



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**Susan Kramer**Baroness Kramer, House of Lords

Susan Kramer read Politics, Philosophy and Economics at St Hilda's College, Oxford. She went on to obtain an MBA from the University of Illinois, USA.

She began her career in banking in 1982 at Continental Illinois Bank, then the world's largest commercial lender. She was a Vice-President at Citicorp in Chicago working with large national and multi-national companies. After returning to the UK, Susan and her husband set up a number of partnerships including Future Water International which constructed a waste-water treatment scheme in rural Hungary and Infrastructure Capital Partners which advised on infrastructure finance in Central and Eastern Europe.

Susan joined the Liberal Democrats in 1993 and became involved in local campaigns including opposition to expansion at Heathrow airport. She was a Liberal Democrat candidate for the Parliamentary seat of Dulwich and West Norwood in 1997 and for the European Parliament in 1999.

In 2000 Susan was the Liberal Democrat candidate for Mayor of London. In 2005 she was elected MP for her constituency of Richmond Park, losing the seat in 2010. Susan was introduced into the House of Lords in 2011 and was appointed as Minister of State for Transport in October 2013.

In 2015 Susan was appointed by Tim Farron as the Party Spokesperson for Economics.



Vladimir Ivanov

Senior Financial Economist, US Securities and Exchange Commission

Vladimir Ivanov is a Senior Financial Economist with the Office of Corporate Finance at the Division of Economic and Risk Analysis, US Securities and Exchange Commission. He has been with the SEC since 2009. His areas of expertise include small business financing, public and private securities offerings, and venture capital and private equity. At the SEC, Vladimir has worked on a number of Dodd-Frank rulemakings primarily related to corporate disclosure and executive compensation. Most recently, he has been the lead economist on two JOBS Act rulemakings – Title III: Crowdfunding and Title II: General Solicitation – and has participated in the JOBS Act Title IV: Regulation A rulemaking. At the Commission, he has also designed and executed economic studies on capital raising in the Regulation D market, disclosure and capital raising in the OTC market, and shell reverse mergers in the OTC market. His research has been published in the *Journal of Finance*, the *Journal of Financial Economics*, the *Journal of Financial and Quantitative Analysis*, and other prestigious academic journals. Vladimir is a recipient of the SEC's Economic Research Award.

Before coming to the SEC, Vladimir was an Assistant Professor in Finance at the University of Kansas' School of Business, where he taught classes in corporate finance, entrepreneurial finance, and investments. He received his BS in Finance from the University of National and World Economy (Bulgaria), MBA in Finance from the University of Memphis, and PhD in Finance from Vanderbilt University.



Julie Maupin

Senior Research Fellow, Max Planck Institute for Comparative Public Law and International Law; and Senior Fellow, Centre for International Governance Innovation

Julie Maupin is a Senior Research Fellow at the Max Planck Institute for Comparative Public Law and International Law in Heidelberg, Germany. She is also a Senior Fellow with the Centre for International Governance Innovation, where she leads a project that seeks to identify effective governance models and regulatory approaches to emergent distributed ledger/blockchain technologies such as cryptocurrencies and smart contracts. A dual-trained lawyer and economist, Julie has taught international and comparative law courses at leading law faculties in North America, Europe and Africa. Her active areas of research include cryptocurrencies, blockchains, and other distributed ledger technologies; investment, trade, money and finance; regional integration and economic development, and public/private regulatory networks. She serves as Associate Editor for the Journal of World Investment & Trade and sits on the board of editors of the Zeitschrift für ausländisches öffentliches Recht und Völkerrecht and other prestigious law journals. Julie regularly advises international organisations, governments, businesses, and NGOs on matters of economic law and policy, with a special emphasis on developing countries. She is an alumna of the University of Washington (BS Economics), Yale University (Juris Doctor & MA Economics) and the Graduate Institute for International and Development Studies in Geneva (PhD, International Studies).



Aki Kallio

Ministerial Adviser (LLM), Financial Markets Department, Ministry of Finance, Finland

Ministerial Adviser Aki Kallio works as a lawyer in the Financial Markets Department of the Ministry of Finance of Finland. His main responsibility area consists of various assignments relating to divergent legislative and other actions of Financial Markets Department especially in the field of capital and bond markets. In particular, Aki works with issues falling under the scope of Capital Markets Union and is in charge of assessing and developing both Finnish bond and alternative finance markets (especially crowdfunding and fintech sectors). In this role Aki acts, among others, as a Finnish representative of the Commission's informal expert group European Crowdfunding Stakeholder Forum (ECSF) which assists the Commission in developing EU-wide policies for crowdfunding. In addition, Aki acts as an occasional Finnish government expert representative in several other expert groups organised by the European Council and European Commission. Aki holds an LLB and LLM degrees with distinction from the University of Helsinki.

16 Information for conference attendees

### Assistance

If you need assistance or have any questions during the event, please speak with one of the conference organisers at the registration desk, located inside the Grace Howard room.

#### Wi-Fi

Once you have registered on arrival and collected your attendee conference badge, you will be issued a ticket detailing the Wi-Fi network and password for the event.

### **Chatham House Rules**

Please note that Chatham House rules apply to Session 3 *Cryptocurrency and Blockchain Technology* and Session 4 *Regulation and Policy* of the conference.

When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.

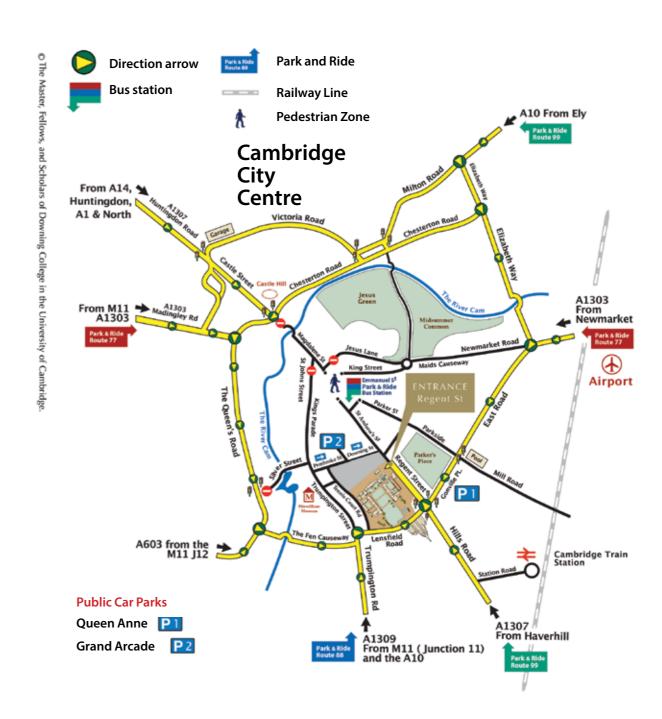
## **Photography**

A professional photographer will be on site taking photos during the event; these images may be used by Cambridge Judge Business School for promotional purposes within brochures, newsletters, marketing material and/or as digital images. If you have any concerns or questions regarding this, please speak with one of the conference organisers found at the registration desk.

### Cambridge taxi details

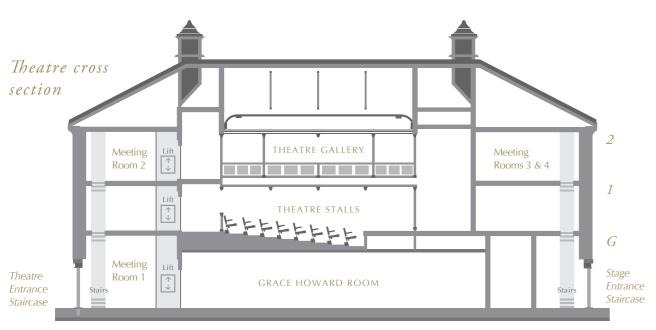
Panther Taxis +44 (0)1223 715715

Map of the local area 17

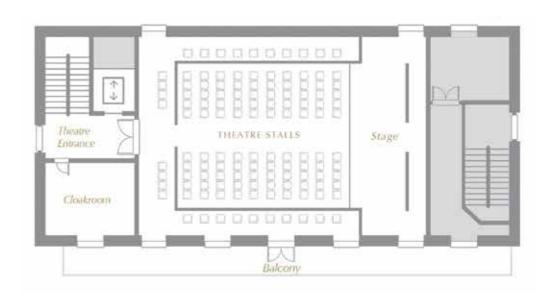


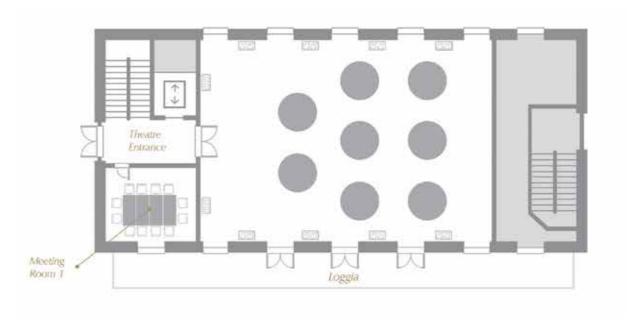
## Howard Theatre meeting rooms 1-4

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Theatre Entrance staircase and lift leads down to fully accessible WCs in basement.







## **Cambridge Centre for Alternative Finance**

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