

Professor Yang Chen

Name

Yang CHEN

Date of Birth

4th April 1957

Citizenship

Republic of Singapore

Place of Employment

Faculty of Science and Technology
Department of Mathematics,
University of Macau,
Av. Padre Tomàs Pereira, Taipa
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Title of Current Appointment

Professor of Mathematics,
University of Macau,
Macau, China
Period of Job Experience in UM: 2012 August to Present.

Complete List of Publications

<http://scholar.google.co.uk/citations?user=q-LZZbwAAAAJ>
https://www.researchgate.net/profile/Yang_underscore_Chen19

Higher Education

- B. Sc. (Physics) National University of Singapore (1978-1981)
- M. Sc. (Physics) Illinois Institute of Technology (1981-1983)
- Ph. D. (Physics) University of Massachusetts, Amherst (1983-1987)

Brief Summary

I have to date 108 articles published in Journals indexed in the SCIE.

The Journal, *Random Matrices: Theory and Applications* published by the World Scientific Publications, co-Founded by myself has the first Impact Factor (2016) of 1.351.

Past Appointments

Lecturer, Reader and Professor (Personal Chair) of Mathematical Physics at Imperial College London

(Feb. 1992—Aug. 2012).

Scientific Co-worker the Max-Planck-Institut für Festkörperforschung with Professor Konstantin Efetov (Jan. 1991—Feb. 1992).

Visiting Scholar at Trinity College Cambridge University (Dec. 1989—Jan.1990)

Post-Doctoral Research with Professor Peter Wölfle at the Institut für Theorie der Kondensierten Materie Universität Karlsruhe-Germany (Feb. 1989—Jan.1990)

Visiting Scientist (Consultant) at the University of Florida-Gainesville (Nov. 1988—Feb. 1989 and other occasions during the 1990's.)

Post-Doctoral Research with Professor Sir Sam Edwards at the Cavendish Laboratory (Oct. 1986—Nov. 1988)

Research Assistantship at the Department of Physics, University of Massachusetts-Amherst (1983-1986)

Research Assistantship at the Department of Physics, the Illinois Institute of Technology (1981-1983)

Infantry Section Commander, Singapore Armed Forces (1975-1978).

Honors and Awards

2018 Macau Science and Technology development fund, Natural Science Award, Third Prize, “Random matrices and its applications”, MOP 400000.

Fellow, Institute of Physics (UK) 2005–2012

Chang Jiang Chair Professorship awarded by the Ministry of Education, China 2005—2006. Returned to Imperial College Feb. 2006.

Honorary Fellow, Department of Mathematics, University of Wisconsin-Madison, 2002. Invited by Professor Richard Askey.

Visiting Scholar, Stanford University, April 2009. Invited by Professor Iain Johnstone.

Research Membership, Mathematical Science Research Institute, Berkeley, programme on “Random Matrices and Interacting Particle Systems,” August–October 2010.

Invited Talks (A Selection)

Also Co-organizer, “Random Matrices EurAsia 2017, 28 July 2017 to 31 July 2017, at the School of Mathematics, Fudan University, Shanghai.

Invited Speaker “AIM workshop: Painleve equations and their applications,” Palo Alto, California, Feb. 05— Feb. 11, 2017.

Invited Speaker at “International conference on Special Functions: Theory, Computation, and Applications 2017,” June 5—June 9, 2017, City University of Hong Kong, at the special session “Random matrices”.

Invited Speaker “25th International conference on finite or infinite dimensional complex analysis and applications,” 26–30 June 2017 (ICFIDCAA), at the Hong Kong University.

Invited Speaker at “Workshop on Differential Equations,” 06 December to 12 December 2016, Institute of Mathematics, Polish Academy of Science, Warsaw, Poland.

Invited Speaker at “Conference on Nonlinear Systems and Dynamics,” 16 December to 18 December 2016, IISER Kolkata, India.

Invited Speaker, “Workshop on differential equations and its applications,” Shenzhen University, Oct 20–Oct. 24, 2016.

Invited Speaker at “Trends in Computational Mathematics”, City University of Hong Kong, January 18 to 20, 2016.

Invited Speaker at “Master Lecture Workshop in Mathematics/Prof. Horng-Tzer Yau” at TSIMF in Sanya, China, December 27–30, 2015.

Invited Speaker, at the Steklov Institute, Moscow, Russia, 22-23 December 2015, Conference in Memorium of Academician A. A. Gonchar.

Invited Speaker, at the Kavli Institute of Theoretical Physics China, Beijing, 19-August, 2015, Conference in memory of Sir Sam Edwards.

Invited Speaker, 13th International Symposium on Orthogonal Polynomials, Special Functions and Applications (OPSFA-13), (01-June to 05-June 2015), NIST, USA.

Invited Speaker, in honor of the 70th birthday of Mourad Ismail, Shanghai Jiao Tong University, Shanghai, China, 16-Oct. to 22-Oct. 2014.

Invited Speaker, “Random Matrix Theory: Foundations and Applications”, Jagiellonian University, Cracow, Poland, July 1 to July 6 2014.

Invited Speaker, mini symposium on Toeplitz matrices and operators (ILAS 2014), Aug. 6—9, 2014, Seoul, South Korea.

Invited Speaker, Conference in Honor of the 90th Birthday of Freeman Dyson, August 26 to August 29, 2013, Institute for Advanced Study, Nanyang Technological University.

Invited Speaker, Advanced School/Workshop on Random Matrices and Growth Models,

The Abdus Salam International Centre for Theoretical Physics, 02–13 September 2013, Trieste, Italy

Banff International Research Station, 12w5015, “Integrable systems, growth processes and KPZ Universality,” in Honor of Harold Widom’s 80th Birthday, 23-09-2012 to 28-09-2012

Semi-Plenary Speaker, FoCM 2011, Budapest, Hungary. Workshop C5, Random matrix theory, computations and applications.

Speaker, Random Matrix Theory and Its Applications 1. Mathematical Science Research Institute, Berkeley, USA. (13-09-2010—17-9-2010).

European Consortium For Mathematics In Industry (2008), mini-symposium in *Asymptotic Analysis and Applications* (June 2008).

CRM Thematic year 2008–2009, Random Matrices, Related Topics and Applications (August 2008)

Workshop on Orthogonal Polynomials, dedicated to Walter Van Assche’s 50th Birthday (May 2008)

Plenary Lecture. International Conference on Numerical Analysis and Applied Mathematics 2006. Official Conference of the European Society of Computational Methods in Science and Engineering (ESCMSE).

Random Matrices and Its Applications. One week workshop at MSRI, Berkeley, in honor of Harold Widom’s 70th birthday. Session Chair. Participants include Freeman Dyson and Andrei Okounkov (Sept. 2002).

“On the Akhiezer polynomials” Invited Lecture delivered at the *London Mathematical Society Invited Lecture Series 2002*, Leeds University (June 2002).

Invited participant and speaker at the Isaac Newton Institute programme *Strongly correlated electron systems*. (May 2000).

AMS/IMS Joint Summer Research Conferences on “Random Matrices, Statistical Mechanics and Painleve Transcendents” at Mount Holyoke College (June 1996).

Invited Short Lecture Course

A series of Lectures on Random Matrix Theory, Fudan University (Sept. 2008)

A series of Lectures on Random Matrix Theory, Hong Kong University of Science and Technology (Sept. 2009).

Professional and Administrative Activities

Professional

Referee for

Constructive Approximation

Indagationes Mathematicae

Inventiones Mathematicae

Journal of Approximation Theory

The Ramanujan Journal

Journal of Computational and Applied Mathematics

Journal of Physics A: Mathematical and Theoretical

Journal Physics: Condensed Matter

Physical Review B

Physical Review E

Physical Review Letter

Physics Letter A

External referee

Promotion Committees, from Associate to Full Professor: University of California-Santa Cruz; University of Arizona-Tucson.

Engineering and Physical Science Research Council (EPSRC) Senior Research Fellowship Committee.

EPSRC Advanced Fellowship Committee.

EPSRC Research grant applications.

The Nuffield Foundation's Scholarship Committee.

For the President of the London Mathematical Society's Junior Whitehead Prize Committee.

Appraisal on Freeman Dyson as requested by the President of the London Mathematical Society (LMS) on Dyson's election as Honorary Fellow of the LMS.

Advisory Board, Journal of Physics A (2005—2007).

Editorial

I am the Founding Editor and Co-Editor-In-Chief, of a Journal dedicated to Random Matrices.

Random matrices: Theory and Applications, published by the World Scientific Publication Company. <http://www.worldscinet.com/rmta/>

My Journal is indexed in SCIE. Its first Impact Factor, obtained in 2016 is 1.351. My Journal is currently ranked 40/124 in Statistics and Probability, based on the Journal Citation Report 2016.

This journal was launched in early 2012. Craig Tracy, Dan-Virgil Voiculescu, Van Vu, Harold Widom, Peter Forrester and others are on the Editorial Board. Terry Tao, Van Vu, Ivan Corwin have contributed to the Journal.

<http://www.worldscinet.com/rmta/>

Mentoring and Appraisal

I provide, informal guidance and advice to Junior Faculty members of the Mathematics Department at the University of Macau. I also sit on department promotion committee, mainly to appraise and recommend the promotion to Associate Professors and Professors.

Recommendation of the extension of contract to those who are over 65.

Organization

Co-organizer “IMS National University of Singapore, Random Matrices EurAsia-2020”, 11-24 May, 2020, Singapore.

Co-organizer “Complex ODEs: Asymptotics, orthogonal polynomials and Random matrices”, Random Matrices EurAsia-2018, PISA, Italy.

Co-organizer “AIM workshop: Painleve equations and their applications,” Palo, Alto, California , Feb. 05–Feb. 11, 2017

Random Matrices EurAsia 2017, A workshop, from 28 July to 31 July, held at the Fudan University. Around 50 speakers from France, Italy, China, Hong Kong, Australia

Random Matrices EurAsia 2016: A workshop, from 08 July to 10 July, held at the University of Macau. I am the Organizer; around 30 speakers from France, Germany, China, Hong Kong, Russia.

The 10th ISAAC Conference 2015-Aug. 02 to Aug. 07, held in Macau. I am the session organizer on Random Matrices.

Fellowship Committee (Chair) XIII International Congress of Mathematical Physics (1999-2000).

Co-Chair with Z. D. Bai of the National University of Singapore and Y. C. Liang of A2Star on a research programme in Random Matrix Theory and Its Applications, at the Institute of Mathematical Sciences (Singapore) (Feb. 2006—Mar. 2006).

Random Matrix Theory II at the Institute for Mathematical Sciences, National University of Singapore in 18-June to 15-August 2012. Co-organizers, Y.C. Liang and Z.D. Bai.

Network

European Network In Geometry, Mathematical Physics and Applications(ENIGMA)
Contract number:MRTN-CT-2004-5652.

Academic Visitors

Richard Askey, Estelle Basor, Mourad Ismail, Alexander Its, Craig Tracy, Walter Van Assche, Pierre Van Moerbeke, Tamara Grava, Harold Widom, Lun Zhang (Fudan), Enqui Fan (Fudan), Damien Passemier (previously HKUST), Mathew McKay (HKUST), Ao Yang (Academy of Science of China).

Administrative Duties at Imperial College

Post Graduate Coordinator: Mathematical Physics (1992—1995).

Staff-Student Committee (1995—1998).

Departmental Library Committee (1995—2000).

Chapman Fellowship Interview Panel: Pure Mathematics (2003).

Chapman Fellowship Interview Panel: Applied Mathematics (2007)

Imperial College Library Staff Review (2003).

Administrative Duties at The University of Macau

M.Sc. and Ph. D. students recruitment committee.

Wrote a “Strategic and Academic Statement” on the “Future Direction of the Mathematics Department.”

Ph. D. and Master Thesis defense committees.

Promotion and Appraisal Committee, which concern Promotion of Junior Faculty and extension of Senior Faculty employment.

Grant History

Follow this link. <http://gow.epsrc.ac.uk/ViewPerson.aspx?PersonId=21512>, for my grant applications.

Start Up Grant SRG020FST1213RCY, MOP 150,000.00, University of Macau, 2012.

Research Grant Awarded by Macau SAR Science and Techonology Development Fund, MOP 1,259,750.00, 2012, FDCT 077/2012/A3.

MYRG2014-00004-FST Awarded by the University of Macau, MOP 718,750.00, 2014–.

MYRG2014-00011-FST Awarded by the University of Macau, MOP 500,000.00, 2014–.

Research Grant Awarded by the Macau SAR Science and Technology Development Fund, MOP 1,261,500.00, 2015, FDCT 130/2014/A3.

Research Grant Awarded by the Macau SAR Science and Technology Development Fund, MOP 734,400.00, FDCT -023/2017/A1

MYRG2018-00125-FST Awarded by the University of Macau, MOP 477,000.00, 2018–.