News in Asia Pacific Region

Professor Nalini Joshi is Made an Officer of the Order of Australia

In the Queen's Birthday Honours, Professor Nalini Joshi is made an Officer of the Order of Australia for distinguished service to mathematical science and tertiary education as an academic, author and researcher, to professional societies, and as a role model and mentor of young mathematicians.

Nalini Joshi holds a PhD and MA from Princeton University in Applied Mathematics and a BSc (Hons) from the University of Sydney. She has held lecturing positions and fellowships at ANU, UNSW, and the University of Adelaide, as well as visiting positions at institutions including Princeton, Kyoto, Manchester and the Isaac Newton Institute of Mathematical Sciences at Cambridge University. In 2002, she returned to the University of Sydney to take up the Chair of Applied Mathematics and became the first female mathematician to hold a Chair there. She was awarded the Georgina Sweet Australian Laureate Fellowship in 2012.

Nalini's research interests lie in non-linear differential and difference equations, with a particular focus on asymptotic methods. She develops mathematical methods to study solutions of integrable systems, which arise as universal models in physics, such as the Painleve equations. Currently, Nalini is creating a geometric framework to reveal properties of critical solutions of nonlinear models that reflect universal structures in physical models.

Honours for Hugh Possingham

Professor Hugh Possingham's sustained, top-level leadership and research contributions in Mathematics and Ecology have very recently been recognised with two significant honours.

Firstly, the US National Academy of Sciences elected Hugh Possingham as a Foreign Associate at its recent Annual Meeting. Foreign associates are non-voting members of the Academy, elected in recognition of their distinguished and continuing achievements in original research.

Secondly, he has been appointed Chief Scientist with The Nature Conservancy, one of the world's largest conservation groups.

Hugh Possingham completed his Applied Mathematics Honours at The University of Adelaide in 1984. After attaining a Rhodes Scholarship he completed a PhD at Oxford University in 1987. Postdoctoral research periods followed at Stanford University and ANU (as an ARC QEII Fellow). He was elected to The Australian Academy of Science in 2005. His prizes include Fenner medal, Australian Mathematical Society medal, two Eureka prizes.

His laboratory uses mathematical and statistical tools to solve problems in ecology and conservation. The recent research successes include: producing the software that rezoned the Great Barrier Reef, a new theory of optimal monitoring, advances in metapopulation theory, tests of spatial population models, decision support tools for fire, weed and pest management, protocols for optimal monitoring and decision support for setting global conservation priorities.

Frank Robert de Hoog Awarded the ANZIAM Medal

Frank Robert de Hoog is awarded the ANZIAM (Australia and New Zealand Industrial and Applied Mathematics) medal for his contributions to applied, computational and industrial mathematical research. His contributions to ANZIAM have had a significant impact especially in the development of the student support scheme.

Frank de Hoog commenced his studies at the University of Western Australia in 1966 and graduated with first class honours in Mathematics in 1970. He was awarded the Australian Mathematical Society's Medal in 1988. He has been working at CSIRO's Division of Mathematics and Statistics. His success at research has been

recognised by his fairly rapid promotion to a Chief Research Scientist position on the basis of scientific merit, and his recent appointment as CSIRO Fellow. There are many highlights in the research that Frank has undertaken during his more than 35 years with the CSIRO. Some, but not all, significant examples include: (i) Laplace Transform Inversion, (ii) Smoothing Spline Optimisation, (iii) Fast Methods for Toeplitz Matrices and etc.

It is acknowledged that Frank played a key role, along with others, in the successful establishment of the Mathematics-in-Industry Study Group Meetings, which are now an important part of the R&D image of ANZIAM. The first Study Group Meeting was organised by the then CSIRO Division of Mathematics and Statistics, with Noel Barton and Frank playing lead roles along with strong support from Kerry Landman and Terry Speed. Frank has been a regular attendee since 1976 invariably giving a talk. He was a key organiser for the meeting in Merimbula in 1984. As an extension of his strong support for students in CSIRO, in terms of student support schemes and internship programs, Frank garnered financial support for ANZIAM from CSIRO on the understanding that the funds would be exclusively used to support student participation at ANZIAM. This has turned into the CSIRO-ANZIAM Student Support Scheme and has become a feature of AustMS conferences as well as those of ANZIAM. Thus, for all his contributions, he is awarded ANZIAM medal for 2016.

Joshua Ross Awarded J H Michell Medal

The 2016 J H Michell Medal is awarded to Associate Professor Joshua Ross from the University of Adelaide for his significant contributions to methodology in Applied Mathematics and, through its application, to conservation biology and public health policy. The J H Michell Medal is awarded by ANZIAM in honour of John Henry Michell to an outstanding new researcher, within 10 years of their PhD, who has carried out distinguished research in applied and/or industrial mathematics, and where a significant proportion of the research work has been carried out in Australia and/or New Zealand.

Joshua completed his undergraduate and postgraduate education at the University of Queensland: a Bachelor

of Arts (Economics) in 2002, a Bachelor of Mathematics and Statistics in 2003, a Graduate Certificate in Higher Education in 2006 and his PhD in Mathematics in 2007. After a year as a post-doctoral research fellow in the Mathematics Institute, The University of Warwick, Joshua went to the University of Cambridge as a Zukerman Junior Research Fellow at King's College (October 2007 to March 2010). In March 2010 he joined the School of Mathematical Sciences, The University of Adelaide, as a Lecturer. He was promoted to Senior Lecturer in 2013 and to Associate Professor in 2015.

Joshua has accrued an impressive list of accomplishments. Over the last five years he has had three successful ARC Discovery Projects (one as a sole applicant), a Royal Society International Exchanges Scheme grant, and an NHMRC grant for the Centre of Research Excellence in Policy Relevant Infectious Disease Simulation and Mathematical Modelling. He was awarded an ARC Future Fellowship for 2013–2017. He is also a contributor to the Data to Decisions Cooperative Research Centre established in 2014 through which he has a project grant. In 2013 he received an Australian Institute of Policy and Science Young Tall Poppy Award.

For his many creative and significant contributions in Applied Mathematics, Joshua Ross is awarded the 2016 J H Michell Medal.

Australian Academy of Science Fellows

On May 23, 2016, the Australian Academy of Science announced the election of 21 new Fellows for their outstanding contributions to science and scientific research. Among the 21 Fellows, there are two scientists whose interdisciplinary research include applied mathematics.

Professor Toby Walsh

Professor Toby Walsh of UNSW Australia is elected as a new Fellow for his important scientific contributions in three closely related areas: Artificial Intelligence, constraint programming and computational social choice. He has been a pioneer in Theoretical Artificial Intelligence, building on ideas from fields including statistical physics, economics and game theory to study many complex

and challenging optimisation problems such as scheduling and vehicle routing.

Toby Walsh is a leading researcher in Artificial Intelligence. He was recently named in the inaugural Knowledge Nation 100, the one hundred "rock stars" of Australia's digital revolution. He is Guest Professor at TU Berlin, Professor of Artificial Intelligence at UNSW and leads the Algorithmic Decision Theory group at Data61, Australia's Centre of Excellence for ICT Research.

Toby Walsh received an MA degree in Theoretical Physics and Mathematics from the University of Cambridge and a MSc and PhD degree in Artificial Intelligence from the University of Edinburgh. He is noted for his work in constraint programming and propositional satisfiability.

Professor Naomi Ruth Wray

Naomi Wray is a leading complex trait statistical geneticist. She has significantly contributed to quantitative genetic and evolutionary selection theory, with applications in agriculture and medicine. Her theoretical work on the prediction of rates of inbreeding in populations undergoing selection, led to changes in agricultural selection programmes worldwide in balancing genetic improvement with levels of inbreeding. She has developed innovative quantitative genetic methods for the estimation of genetic parameters from genetic epidemiology studies and methods for genetic risk prediction. She has applied these to psychiatric disorders, thereby contributing to the elucidation of the genetic basis of common, distressing, complex diseases.

Naomi Wray is co-director of the Centre of Neurogenetics and Statistical Genomics (CNSG) within the Queensland Brain Institute (QBI) of the University of Queensland. She is a National Health and Medical Research Council Principal Research Fellow. Her research focusses on development of quantitative genetics and genomics methodology with application to psychiatric and neurological disorders.

Naomi's early training was in quantitative genetics with application in livestock. She holds a BSc in Animal Science from the University of Edinburgh (1984), an MS in Animal Breeding and Statistics from Cornell (1986) and a PhD in Quantitative Genetics from the University of Edinburgh (1989). She moved to Australia in 2005 to join the Queensland Institute of Medical Research where she established and led the Psychiatric Genetics Laboratory and joined QBI in 2011. She held Australian Research Council ARC Future Fellowship (2010–2013).

The 16th Annual Conference of Asia Pacific Network of Science & Technology Centres Opens in Beijing

The 16th Annual Conference of Asia Pacific Network of Science & Technology Centres (also referred to as ASPAC 2016) opened at China Science and Technology Museum (CSTM) on May 18.

Professor Han Qide, Vice Chairman of the National Committee of the Chinese People's Political Consultative Conference (CPPCC) and President of the China Association for Science and Technology (CAST), sent a message of congratulations to the conference, pointing out that science centres are important venues for all countries around the world to enhance the public understanding of science and technology, to encourage mass creative invention, as well as to promote popular entrepreneurship and innovation; and they play an irreplaceable role in popularising science and technology, disseminating science and culture, and improving the general public's scientific literacy. He went on to emphasise that China takes the construction of science centres as a key national project for promoting the general public's scientific literacy; and has included it into the National Plan for Science and Technology Development, as well as the construction of the modern public cultural service system. Over the past years and with CSTM as the mainstay, science centres and science museums in China have, through their practices and explorations, gradually built up a system of modern science and technology museums with Chinese characteristics whose purpose is to realise the inclusiveness of public education and the balanced coverage by science popularisation infrastructure across the country, thus promoting the fairness and equity of popular science services. In the message, Prof Han also gave expression to the hope that the convening of the conference will give further impetus to the overall

development of science and technology museums in China; help strengthen the cooperation among international peers and forge partnerships between the science community on the one hand and the industries on the other; boost the service improvement and functional expansion of science centres, so as to enable them to provide better services for the innovation-driven development and for the enhancement of the scientific literacy of all citizens.

China Science and Technology Museum is one of the initiators of ASPAC. In 1998, the just-established ASPAC convened its first annual conference in Beijing. The return to Beijing of the ASPAC Annual Conference after a period of 18 years is a clear indication of ASPAC's great trust in China; it also bears testimony to the network's full acknowledgement of the development of science and technology museums in China over the last two decades.

During the 16th Annual Conference of ASPAC, members of the International Program Committee (IPC) of the 2017 Science Centre World Summit (SCWS) also met at CSTM. As well, a capacity building training course was organised within the ASPAC 2016 framework targeting directors of science and technology museums of various places in China.

World Telecommunication and Information Society Day Celebrated in Beijing

May 17 is the day designated by UN and the International Telecommunication Union (ITU) to be celebrated as World Telecommunication and Information Society Day. The Ministry of Industry and Information Technology (MIIT) and the Chinese Institute of Communications held a meeting on May 17 to mark the Day. Zhang Feng, Chief Engineer of MIIT, attended the meeting and delivered a speech. A message from Zhao Houlin, secretary-general of ITU, was read at the meeting.

In his speech, Zhang Feng said that ITU had defined the theme of this year's World Telecommunication and Information Society Day as "ICT entrepreneurship for social impact" and this theme would play a positive role in improving the world-wide environment for innovation and entrepreneurship in ICT. The theme, Zhang added, is also highly compatible with the policy of encouraging "mass entrepreneurship and innovation" adopted by the Chinese government. He mentioned a whole set of measures that MIIT had taken to support the mass entrepreneurship and innovation campaign, such as boosting the development of ICT industry, and the implementation of the Internet power strategy and the Internet plus action plan.

Professor Chenyang Xu Awarded the 2016 Ramanujan Prize

The Ramanujan Prize for young mathematicians from developing countries, created in the name of Srinivasa Ramanujan, has been awarded annually since 2005. The Prize was originally instituted by the Abdus Salam International Centre for Theoretical Physics (ICTP), the Niels Henrik Abel Memorial Fund, and the International Mathematical Union (IMU). The participation of the Abel Fund ended in 2012; the 2013 Prize was jointly funded and administered by the ICTP and the IMU. The Department of Science and Technology of the Government of India has agreed to fund the Prize for a 5-year period, starting with the 2014 Prize. The Prize is awarded annually to a researcher from a developing country, who must be less than 45 years of age on December 31 of the year of the award, and who has conducted outstanding research in a developing country.

This year, the award is given to Chenyang Xu of Beijing International Center of Mathematical Research in China to recognise his outstanding works in algebraic geometry, notably in the area of birational geometry, including works both on log canonical pairs and on Q-Fano varieties, and on the topology of singularities and their dual complexes.

More specifically, Xu proved in joint works with C Hacon and J McKernan the boundedness of log canonical pairs and resolved in the affirmative Shokurov's ACC (Ascending Chain Condition) Conjecture on log canonical thresholds. Xu established in a joint work with C Li a procedure by which any generic Q-Fano test configuration can be replaced by a special test configuration with Q-Fano fibres such that the Donaldson–Futaki invariant does not increase, thereby reducing K-stability issues to testing against such special test configurations. Xu proved the finiteness of algebraic fundamental groups of klt (Kawamata log terminal) singularities and in a joint work with Kollár proved for a Calabi–Yau pair (X, D) that the

fundamental group of the dual complex of D is a quotient of the fundamental group of the smooth locus of X.

Building his work in part on applications and ramifications of methods from the Minimal Model Program, Xu has now demonstrated expertise over an impressively wide range of techniques in algebraic geometry and beyond to tackle a broad spectrum of geometric problems from birational geometry in characteristic 0 and characteristic p, topology of algebraic varieties, arithmetic geometry and Kähler geometry, and he has contributed to the strengthening of the subject of algebraic geometry in China.

Gang Bao Elected as SIAM Fellow 2016

Professor Gang Bao from Zheijiang University was elected as SIAM Fellow for his significant and lasting contributions to inverse problems in wave phenomena and electromagnetics applied to optics. Professor Gang Bao has extensive research on modelling, analysis, and computation of diffractive optics, nonlinear optics, near-field and nano optics, and electromagnetics as well as inverse and design problems in partial differential equations, numerical analysis and large scale scientific computing. He obtained his BS in Computational Mathematics from China Jilin University and MA in Mathematical Sciences and PhD in Applied Mathematics both from Rice University.

News from Hong Kong

2016 Hong Kong Mathematical Society Distinguished Lecture

2016 Hong Kong Mathematical Society Distinguished Lecture by Professor Yum-Tong Siu on "The Past, Present and Future of Several Complex Variables" took place on May 21, 2016 in The University of Hong Kong.

Professor Yum-Tong Siu is a distinguished Mathematician in complex analysis whose research interests include complex analysis, differential geometry and algebraic geometry and has resolved numerous outstanding problems and conjecture 33 among others. The lecture is focused on different stages of development on solving problems about complex variables. Problems like several complex variables, the complex Neumann problem were also included in the discussion session.

Shaw Prize in Mathematical Sciences 2016

The Shaw Prize in Mathematical Sciences 2016 is awarded to Professor Nigel J Hitchin of Oxford for his far reaching contributions to geometry, representation theory and theoretical physics. The fundamental and elegant concepts and techniques that he has introduced have had wide impact and are of lasting importance.

After three years of postdoctoral work in Princeton and New York, he returned to Oxford as a Research Fellow at Wolfson and from 1979 until 1989 was CUF Lecturer and Tutor at St Catherine's College. He then took up a Chair in Warwick and five years later to the Rouse Ball Chair in Cambridge. He returned to Oxford, and to New College, as Savilian Professor in 1997.

Nigel's research is in the area of differential and algebraic geometry, in particular problems related to the interface of geometry and theoretical physics.

News from India

President of Indian Mathematical Society

Professor D V Pai of Indian Institute of Technology Bombay is elected as the President of Indian Mathematical Society for a period of one year with effect from April 1, 2016. Professor Devidas Vyankatesh Pai is a Professor Emeritus at Indian Institute of Technology Bombay. He did his undergraduate studies at Wilson College and Ismail Yusuf College, Bombay. He secured first class with distinctions, and was ranked first at BSc degree examination of Bombay University. He received his MSc degree from

Bombay University in 1966 securing a first class with distinctions.

He worked as Associate Lecturer and Lecturer at Ismail Yusuf College and Sardar Patel College of Engineering respectively during 1963–1967. Since 1967, he has been on the faculty of IIT Bombay. He joined IIT Bombay as Associate Lecturer in July 1967 and was promoted as Lecturer in 1968. He received his PhD degree from IIT Bombay in 1972 while continuing to work as a faculty member. He was promoted as Assistant Professor in 1973 and as Professor in 1983. He worked as Head, Department of Mathematics, during December 1983–December 1987.

He has authored/co-authored over 50 research articles in international/national journals of repute and proceedings of international/national conferences in the areas of functional analysis and approximation theory. He has guided 10 research students for PhD degree in these areas so far.

He worked as the chairman of the organising committee of the International Conference on Methods of Functional Analysis in Approximation Theory held at IIT Bombay, in December 1985 and as a co-editor of the proceedings of this conference published in ISNM series: ISNM76 of Birkhauser Verlag, Basel, 1986. He has held several visiting positions, as well as given several invited lecturers in North America, Europe and the Middle East.

He is a recipient of MAN OF THE YEAR-2000 Decree awarded by American Biographical Institute, USA. He is also a recipient of a best teacher award for excellence in teaching for the year 2000 awarded by IIT Bombay.

News from Japan

MSJ Spring Meeting 2016 at Tsukuba University

The MSJ (Mathematical Society of Japan) Spring Meeting 2016 was held from March 16 to 19 at Tsukuba University, Tsukuba City.

The MSJ Spring and Autumn Meetings are the most important activities of the MSJ. They help the members exchange scholarly information and play a crucial role in the development of mathematics in Japan.

The meeting organised two plenary talks:

- "Research on Gromov–Witten invariants and mirror symmetry" by Dr IRITANI, Hiroshi, Associate Professor at Graduate School of Science, Kyoto University
- "Toric topology" by Dr MASUDA, Mikiya, Professor at Department of Mathematics, Osaka City University

In addition to the above talks, the meeting also organised 7 featured invited lectures. Moreover, the 10 Research Sections organised 32 invited talks and 393 short communications of research papers.

The MSJ Spring prize winner was announced at the meeting. The prize for 2016 was awarded to Dr IRITANI, Hiroshi, Associate Professor at Graduate School of Science, Kyoto University. The prize presentation ceremony was held on March 17. The 2016 MSJ Publication Prize and the 2016 IMSJ Outstanding Paper Prize were presented as well.

The MSJ and Tsukuba University jointly organised two Open Lectures for Citizens. The lectures were aimed at non-professional audience. The titles and the speakers are the following.

- "High-Dimensional Statistics" by Dr AOSHIMA, Makoto, Professor at Institute of Mathematics, University of Tsukuba
- "The Fluidity and Immutability on Convex Polytopes", by Dr HIBI, Takayuki, Professor at Graduate School of Information Science and Technology, Osaka University

The 2016 Algebra Prize

The 2016 MSJ Algebra Prize was awarded to the following MSJ members.

- Dr KATSURADA, Hidenori, Professor at Graduate School of Engineering, Muroran Institute of Technology: L-functions and periods of automorphic forms of several variables
- Dr KURANO, Kazuhiko, Professor at School of Science and Technology, Meiji University: Intersection theory over local rings and its application to the theory of Cohen–Macaulay modules
- Dr SAITO, Masa-Hiko, Professor at Graduate School of Science, Kobe University: Moduli spaces

of connections and differential equations of Painlevé type

FUJIWARA, Kazumasa Received the 6th JSPS Ikushi Prize

Dr FUJIWARA, Kazumasa, PhD student at the Graduate School of Advanced Science and Engineering, Waseda University, was awarded the 6th JSPS Ikushi Prize by Japan Society for the Promotion of Science. He was honoured for his work on "Mathematical foundations of semirelativistic nonlinear fields".

JSPS Ikushi Prize has been established upon an imperial donation to encourage young researchers, especially PhD students.

The 2015 MSJ Prize for Excellent Applied Mathematicians

The 2015 MSJ Prize for Excellent Applied Mathematicians were awarded to the following researchers.

- Dr FURUYA, Michitaka, Assistant Professor at Faculty of Science, Tokyo University of Science: Some approaches for comparing rainbow domination numbers
- Dr MURAKAWA, Hideki, Assistant Professor at Faculty of Mathematics, Kyushu University: Mathematics of cell-cell adhesion: experiments, modelling and analysis
- Dr GOTODA, Takeshi, PhD student at Faculty of Science, Kyoto University: Mathematical analysis of enstrophy dissipation via triple collapse of point vortices
- Dr MONOBE, Harunori, Research Promoter at Organisation for the Strategic Coordination of Research and Intellectual Properties, Meiji University: Condition for existence of travelling wave solutions, composed of convex curves, to an interface equation

MSJ Autumn Meeting 2016

MSJ Autumn Meeting 2016 was held at Kansai University, Senriyama Campus, SuitaCity during September 15–18. The Chair of Organising Committee is Dr NAGAI Hideo, and the Chair of Executive Committee is Dr UEMURA Toshihiro. The official website of the meeting is *http://mathsoc.jp/en/meeting/kansai16sept/*.

The 18th Takagi Lectures

The 18th Takagi Lectures will be delivered at The University of Tokyo, Tokyo during November 5–6. The titles and speakers of the invited talks are the following.

- Ngô Bao Châu (The University of Chicago), "On Geometry of Arc Spaces, the Hankel Transform and Function Equation of L-Functions"
- David Vogan (Massachusetts Institute of Technology), "The Size of Infinite-Dimensional Representations"
- Geordie Williamson (Max-Planck-Institut für Mathematik), "On the Representation Theory of Algebraic Groups"

The details of the lectures are available at: *http://www.ms.u-tokyo.ac.jp/~toshi/jjm/JJM_HP/ contents/takagi/18th/index.htm*

News from Singapore

Oppenheim Lecture

The Oppenheim Lecture is a distinguished lecture series established jointly by the Department of Mathematics and the Institute for Mathematical Sciences of the National University of Singapore (NUS) in honour of Sir Alexander Victor Oppenheim (1903–1997). He was Professor of Mathematics in Raffles College, Singapore from 1931–42 and its Deputy Principal from 1947–49, having been interned as a prisoner-of-war during the Japanese occupation of Singapore. With the establishment of the University of Malaya in 1949, he was the Dean of the Faculty of Arts from 1949–50, 1953–54. He was Vice-Chancellor of the University of Malaya (Singapore) from 1957–61 and of the University of Malaya (Kuala Lumpur) from 1962–65. He was the first Head of the Department of Mathematics.

In the midst of his administrative duties, Oppenheim wrote papers in number theory. He was a student of G H Hardy (1877–1947) and L E Dickson (1874–1954) and was well-known for the Oppenheim conjecture, first formulated in 1929, concerning Diophantine approximation of rational quadratic forms. The conjecture in its full generality was proved by Grigoryi Margulis (Fields Medal 1978) in 1986 using methods

of ergodic theory and properties of discrete subgroups of semisimple Lie groups.

The inaugural Oppenheim Lecture "On the average rank of elliptic curves over function fields" was given by Ngo Bao Chau (Fields Medal 2010) on 28 January 2015.

The Oppenheim Lecture 2016, "Around the Reproducibility of Scientific Research in the Big Data Era: What Statistics Can Offer" was given by Emmanuel Candes of Stanford University on March 16, 2016.

Singapore Mathematical Society (SMS)

The 7th Singapore Mathematics Symposium, an initiative of the Singapore Mathematical Society, was held on September 30, 2016 at the Institute for Mathematical Sciences, National University of Singapore (NUS). The following invited talks were given:

- Ajay Jasra, Department of Statistics and Applied Probability, NUS, "Multilevel Sequential Monte Carlo Samplers"
- Dinh Tien Cuong, Department of Mathematics, NUS, "Fekete points and Beta ensembles on a complex manifold"
- Hoang Viet Ha, School of Physical and Mathematical Sciences, Nanyang Technological University (NTU), "Stochastic Partial Differential Equations and Uncertainty Quantification"
- Zhang Louxin, Department of Mathematics, NUS, "Spaced Seed Technique for DNA Sequence Comparison"

Phillip A Griffiths (Chern Medal 2014), Professor Emeritus at the Institute for Advanced Study, Princeton was invited under the SMS Distinguished Visitor Programme for 2016. He gave two talks "A Tale of Two Mathematicians" and "How Mathematics Fuels the Knowledge Economy" on May 20, 2016 at NUS and NTU respectively.

The following talks for the general public and teachers were organised by SMS:

- Chen Ning, NTU, "An Introduction to Algorithmic Game Theory", March 9, 2016
- Imre Leader, University of Cambridge, (i) "Clueless Voting", (ii) "Thinking versus Knowing", May 25, 2016