



The 7th Kobe University Brussels European Centre Symposium

“Emerging Sciences and a Changing World: EU-Japan in Transition”

Jointly organised with Vrije Universiteit Brussel

Date and Time :

Tuesday 8 November 2016

9:30-18:00

Place :

Vrije Universiteit Brussel

U-Residence

Generaal Jacqueslaan 271, 1050

Brussels, Belgium

9:30-10:00

Opening

MC: Prof. Matsuto Ogawa, Executive Vice President, Kobe University

Opening addresses:

(1) Prof. Hiroshi Takeda, President, Kobe University

(2) Prof. Caroline Pauwels, Rector, Vrije Universiteit Brussel

(3) H.E. Mr. Kazuo Kodama, Ambassador of Japan to the European Union

(4) Mr. Wolfgang Burtscher, Deputy Director-General, Directorate-General for Research and Innovation, European Commission

10:00-13:30

Session 1

Data Science in the Age of Big Data

Session 2

European Values -Unity in Diversity

14:30-18:00

Session 3

Migration and Security

Session 4

Beyond Standard Model at LHC and Neutrino experiments

Organiser: Kobe University

Co-Organiser: Vrije Universiteit Brussel

Data Science in the Age of Big Data

(Chair)

Prof. Peter Schelkens

Vrije Universiteit Brussel, Belgium



Prof. Tias Guns

Business Technology and Operations (BUTO), Vrije Universiteit Brussel, Belgium

Tias Guns is an assistant professor at the BUTO lab of the VUB in Brussels, Belgium. His research lies on the border between data mining and constraint programming, and his main interest is in combining methods from both fields. His PhD was awarded by both the CP and AI community, and he has organized a number of workshops and a special issue on the topic of combining constraint programming with machine learning and data mining.

“Constraint-based data mining with constraint solving”

Abstract:

In today's data-rich world, data mining techniques allow us to extract knowledge from data. However, the amount of knowledge and patterns extracted is often overwhelming. This can be overcome by using constraints to specify more precisely what kind of knowledge one is interested in; simple or complex, with certain properties, statistical guarantees, etc. This asks for generic solution methods that can handle a wide range of such constraints. In this talk, I will review how constraint solving and optimisation offers such generic solution method; what the benefits and challenges are; and how they can be overcome.



Prof. Takashi Matsubara

Graduate School of System Informatics, Kobe University, Japan

Takashi Matsubara is an assistant professor at the Graduate School of System Informatics, Kobe University, Japan, since 2015. He received his M.E. and Ph.D. from Osaka University, Japan, in 2013 and 2015 respectively. He is also a senior visiting researcher at the Center for Information and Neural Networks (CiNet), Japan. His research focuses on neural computation, brain dynamics, neural networks, and machine learning.

“Artificial Neural Networks with Domain Knowledge”

Abstract:

Artificial neural networks (ANNs) are known as universal approximators, which can mimic arbitrary functions, and have achieved success in various regression tasks in a supervised manner, such as image classification and object detection. However, even though we receive much more data from various sources, we do not always have a desired dataset huge enough to obtain features of the target domain automatically. For example, the cost of a detailed examination of a potentially diseased subject is beyond comparison with that of obtaining

tons of animal images from the Internet. We cannot enjoy the benefits of the ANNs. Fortunately, instead of more data samples, we can give prior knowledge of the target domain to the ANNs by modifying their structures or adding constraints, and thereby we have the ANNs become similar to ordinary parameterized models with no loss of their flexibility. Taking general image processing and diagnosis of mental disease based on medical images as examples, this talk will introduce such solutions to non-big data problems.



Prof. Kimiaki Shirahama

Pattern Recognition Group, University of Siegen, Germany

Kimiaki Shirahama received his B.E., M.E. and D.E. degrees in Engineering from Kobe University, Japan in 2003, 2005 and 2011 respectively. After working as an assistant professor in Muroran Institute of Technology, Japan, since 2013 he is working as a postdoctoral researcher at Pattern Recognition Group in the University of Siegen, Germany. From 2013 to 2015, his research activity was supported by the Postdoctoral Fellowship of Japan Society for the Promotion of Science (JSPS), and is now supported by the German Federal Ministry of Education and Research within the project "Cognitive Village: Adaptively Learning Technical Support System for Elderly"..

"Multimedia Sensing: Extracting High-level Semantic Information from Low-level Multimedia Data"

Abstract:

Nowadays, one can easily record a large amount of multimedia data, and what is more, one can access a huge amount of data on the Internet. A key to efficiently finding interesting data in such a situation is "multimedia sensing" where high-level semantic information is extracted from low-level alpha-numerical data using machine learning and data mining techniques. In this presentation, I will present three multimedia sensing systems that have been recently developed by our research group. The first system takes as input a large amount of Web videos and identifies the ones where a particular event (e.g., birthday party or changing a vehicle tire) occurs. The second system focuses on video surveillance in a crowded scene and detects groups of pedestrians who are moving or standing together. The last system continuously monitors the activities of a person based on data, which are obtained from multiple mobile/wearable sensors. I would like to discuss these multimedia sensing systems and possibly pave the way for future international research collaboration.



Prof. Aleksandra Pizurica

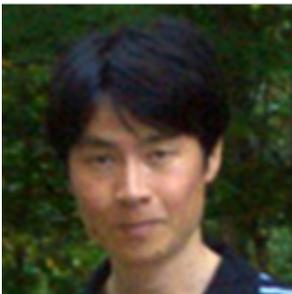
Ghent University, Belgium

Professor at Ghent University since 2009 (Dipl. Ing. Degree 1994, Magister of Science 1997, Ph.D. degree 2002). Senior Area Editor for the IEEE Transactions on Image Processing (since 2016) and Associate Editor for the IEEE Transactions on Circuits and Systems for Video Technology (since 2016). Associate Editor for the IEEE Transactions on Image Processing (2012-2016) and the lead guest editor for the EURASIP Journal JASP, Special Issue "Advanced Statistical Tools for Enhanced Quality Digital Imaging with Realistic Capture Models" (2013). Received the scientific prize "de Boelpaep" for 2013-2014 from the Royal Academy of Science, Letters and Fine Arts of Belgium.

“Emerging Tools in Digital Image Processing and Selected Applications in Medical imaging and Art Investigation”

Abstract:

This talk will address some of the main directions in modern digital image processing in an informal manner, linking the theory with practical applications. The emphasis will be on the following topics: multiresolution analysis and sparse representation, statistical image modelling with Markov Random Fields and emerging non-local processing techniques. We shall also address basic principles of compressed sensing with applications in medical image reconstruction. In particular, recent results in the recovery of Magnetic Resonance Images (MRI) from partial data using compressed sensing and Markov Random Fields will be demonstrated, showing potential for significantly improved reconstruction quality and/or reduced scanning time. The second part of the talk will be devoted to applications of emerging image processing tools in art investigation, focusing on virtual restoration and painter style characterization in a 15th century polyptych by Hubert and Jan Van Eyck, the Ghent Altarpiece. We will also show how mathematical tools and computer simulations can be of help to restorers and art historians in the ongoing conservation-restoration treatment of this masterpiece.



Prof. Koji Eguchi

Graduate School of System Informatics, Kobe University, Japan

Koji Eguchi is an Associate Professor at the Graduate School of System Informatics, Kobe University. Before joining Kobe University, he was an Assistant Professor at the National Institute of Informatics (NII), Japan from 2000 to 2006, and a Research Associate at the National Center for Science Information Systems (NACSIS), Japan in 1999. He was also a Visiting Faculty at Carnegie Mellon University in 2012, and a Visiting Scholar at the University of Massachusetts Amherst from 2005 to 2006.

“Modeling Uncertainty in Large, Multimodal Data”

Abstract:

Research on multimodal data analysis is becoming more important than ever due to the increase in the amount of data. One of the approaches to this problem is parametric/nonparametric Bayesian modeling. This talk covers state-of-the-art multimodal topic models called Symmetric Correspondence Topic Models (SymCorrLDA) that can appropriately model multimodal data considering mutual, inter-modal dependencies, as well as their extensions: the models that can learn the number of components from the data (SymCorrHDP) and that can discover a tree-structured hierarchy of latent topics from given multimodal data (h-SymCorrLDA). More advanced models such as those for video analysis and heterogeneous network analysis are also to be covered.



Prof. Nikos Deligiannis

Vrije Universiteit Brussel, Belgium

Nikos Deligiannis is professor of Data Science in the Electronics and Informatics Department at Vrije Universiteit Brussel. He received a Diploma in Electrical and Computer Engineering from University of Patras, Greece in 2006 and a PhD in Applied Sciences from Vrije Universiteit Brussel in 2012. He was senior

researcher at the Department of Electronic and Electrical Engineering at University College London and consultant on big data technologies at the British Academy of Film and Television Arts (BAFTA), UK. His research interests include big data mining, processing and analysis, internet-of-things networking, and distributed processing.

“Large-scale heterogeneous data gathering and recovery using a copula prior”

Abstract:

The technology behind wireless sensor networks and the internet of things enables sensing, collecting, and communicating data in urban and rural environments. Such a large-scale heterogeneous data collection poses various challenges in view of the limitations in transmission, computation and energy resources of the associated wireless devices. In this talk we will present a novel large-scale data aggregation mechanism, which performs compressed sensing of heterogeneous data gathered by a large number of wireless sensor devices within a geographic area. We will also present a novel data recovery algorithm—built upon belief-propagation principles—that leverages correlated information from multiple heterogeneous signals, called side information. To efficiently capture the statistical dependencies among diverse sensor data, the algorithm makes use of the statistical model of copula functions. Experimentation based on heterogeneous air-pollution sensor measurements from the United States Environmental Protection Agency database showed that the proposed copula-based design provides significant improvements in mean-squared-error performance against state-of-the-art schemes using classical compressed sensing, compressed sensing with side information, and distributed compressed sensing, and offers robustness against measurement and communication noise.



Session 2

10:00 – 13:30 U-Residence sm

European Values – Unity in Diversity

Prof. Harald Schwaetzer

Cusanus Hochschule, Germany

Since 2014 Vice-President of Cusanus Hochschule, Chair of Philosophy, Visiting Professor at the University of Hildesheim, Member of the scientific board of the “Kueser Akademie für Europäische Geistesgeschichte”, Co-Editor of “Allgemeine Zeitschrift für Philosophie”, “Coincidentia. Zeitschrift für Europäische Geistesgeschichte”, “Texte und Studien zur europäischen Geistesgeschichte”, “Philosophie interdisziplinär”, Dr. phil. 1998, Habilitation: 2005, 2002-2009 Cusanus-Dozent at the Institut für Cusanus-Forschung, Trier University, 2009-2014 Chair of Philosophy at the Alanus University, Alfert near Bonn.

“Towards Europe – Nicholas of Cusa’s Contribution”

Abstract:

The paper will focus on the European ideas of the 15th century, especially on Nicholas of Cusa. The 15th century is a period which has developed both the idea and the reality of Europe. Nicholas can be considered as an architect of Europe as well as an important figure of intercultural and interreligious dialogue. Nicholas became one of the architects of the Concordat of Vienna (1448). All this is based on his philosophy. He claims that man has the power and the free will to form himself. He combined his idea of moral as well as intellectual formation with a social and political philosophy. The paper will argue that Cusa’s ideas are a convenient corrective of today’s opinions.



Prof. Nobuo Kazashi

Kobe University, Japan

Professor of philosophy. PhD in philosophy from Yale University. He specializes in Japanese thought, comparative philosophy and peace studies. Involved in peace activities, he co-directed the World Nuclear Victims Forum held in Hiroshima in 2015. Publications in English include "The Passion for Philosophy in a Post-Hiroshima Age" and "The Musicality of the Other: Schutz, Merleau-Ponty, and Kimura," and, in Japanese, Nishida's Philosophy of History (ed.) and The

Unending Iraq War: Questioning Anew from Fukushima (co-ed.). Recipient of the 6th William James Prize by the American Philosophical Association (1991) and a practice award by the Japanese Society for Science and Technology Studies (2012).

“Liberté” and “Brüderlichkeit” as Ideals: Transformative Assimilation in Modern Japan”

Abstract:

Japan's modernization was a process of transformative assimilation of European ideas in almost every field. They included such basic ideas as "individual and society," "freedom and rights," and even "love," for which no fit corresponding words existed in Japanese language; hence, massive endeavors to create neologisms in translation.

Firstly, we consider what was at stake in philosopher Nakae Chomin's struggle in translating Rousseau's *Du contrat social*, which played an igniting role in the Movement for Freedom and Popular Rights in the early phase of Japan's modernization. Then we overview the changes in evaluation Rousseau's democratic ideas were to undergo over time in Japan.

Secondly, we reflect on the way the ideas of "pan-Europe" and "fraternity (Brüderlichkeit)" advocated by Count Richard von Coudenhove-Kalergi, Japanese-born founder of the Pan-European Movement in the 1920s, inspired the formation of the ideas of "pan-Asia" and "the east-Asia community" during the war times and in recent days as well.

Lastly, we try to bring into light some questions of global significance inherent in these processes of transformative assimilation by referring to Emmanuel Todd's understanding of the "diversity of the world" in terms of the correlation between family structure and value system.



Prof. Kiyomitsu Yui

Kobe University, Japan

Executive Assistant to the President, Kobe University; Executive Director, Centre for EU Academic Collaboration, Kobe University; and Professor of Sociology at Graduate School of Humanities. Asian Chair at Sciences Politiques Paris, 2006 – 2007, and Visiting Scholar at Harvard University, 1996-1997. Currently, President of the Society for Sociological Theory in Japan.

“Multiple Modernities in Transition in Europe and Asia; Japan as a Public Asset”

Abstract:

The EU is now fluctuating because of the fundamental impacts of the refugee crisis, terrorism and discrepancy, the clash between segregation and cosmopolitanization that all lead to a deep challenge for EU values. At the basis of the fluctuation there are different pass dependencies of modernities among EU countries. Based upon these different constellations and structures of modernization courses we are now experiencing contemporary transformation of the modern. European values in transition and modernization in transition are intertwined. To understand the situation, including that of the relationship between the EU and Asia, Japan as the first modernized country outside Europe and the USA can contribute to the discussion in comparative perspective on the level of value orientation. In this regard, we can utilize Japan as a public academic asset to understand the difficulties we are facing and participate in the discussion.



Prof. Joachim Schild

Trier University, Germany

Joachim Schild holds the Chair of Comparative Politics at Trier University in Germany. He was awarded a diploma in Political Science from the Free University Berlin in 1989 and a doctoral degree (Dr. rer. pol.) from the University of Stuttgart, Germany, in 1999.

After working for the Franco-German Institute in Ludwigsburg 1990-2002 and for the German Institute for International and Security Affairs (SWP) 2002-2003, he joined Trier University in 2003. His research focuses on Franco-German relations in the European Union, French European Policy and the political economy of European integration. He is the author (with Ulrich Krotz) of *Shaping Europe: France, Germany, and Embedded Bilateralism from the Elysée Treaty to Twenty-First Century Politics* (Oxford University Press, 2013).

“Shifts in Power and Influence: Franco-German-British Relations in a Post-Brexit EU”

Abstract:

This contribution scrutinizes the impact and consequences of Brexit on

- (a) the role and relevance of the bilateral Franco-German link within Europe;
- (b) France’s and Germany’s individual roles, standings, and power within the bilateral link and with the EU at large; and
- (c) the two countries’ bilateral relationships with the post-Brexit UK.

Brexit could imply significant shifts regarding the roles and influence of the Franco-German couple and the two states separately within EU affairs. Furthermore, it will change the preference configurations, strategic options, and coalition patterns among Member States in foreign, security, and defense policy, as well as on single market issues, trade policy, and budgetary politics. In particular, Brexit might even further accentuate the importance of the historically influential Franco-German relationship, now also in policy domains in which Britain hitherto has played a significant role. If Brexit triggers wider disintegrative tendencies, Germany and France are likely to assume a shared leadership role in order to preserve the Union’s integrated core, both geographically and functionally.



Prof. Taiji Hagiwara

Kobe University, Japan

Professor at Graduate School of Economics, Kobe University, Japan. Awarded MA Econ. from Kobe University in 1983. After working at the Research Institute of Economics and Business Administration, Kobe University as a Research Assistant (1984-1989), he moved to Faculty of Economics in 1989. Visiting Fellow at Science Policy Unit, Sussex University, UK 1991-92, Manchester Institute of Innovation Research, Manchester University, UK 1996-97. His research focuses on Economics of Innovation, Input-Output analysis and Marxian economics.

“Labor Value and Exploitation in Global Economy”

Abstract:

We discuss labor value and rate of exploitation in global economy using the international input-output tables. Labor value is defined as the sum of direct labor and indirect labor, which can be calculated using input-output analysis. Exploitation means that amount of labor embodied in wage commodity is less than amount of labor sold. Okishio and Morishima proved the Fundamental Marxian Theorem that the conditions of profit existence and the existence of exploitation are equivalent.

In the context of international input-output tables, we introduce the concept of global labor value, which is the vector of embodied labor of various countries. The Theorem should be modified to note that the existence of profit requires exploitation in at least one country. In other words, exploitation may not exist in some countries (non-exploitation).

In an empirical study using international input output tables, we find that (1) there are non-exploitation cases in several countries and (2) during 1995 and 2009, rate of exploitation increased in the Asian countries of China, Japan, Korea and Taiwan, while advanced countries outside Asia decreased in the rate of exploitation.



Prof. Henrieke Stahl

Trier University, Germany

Professor at Trier University, Germany, since 2003. PhD from Trier University, Germany, in 2000. Research assistant at Trier University in 1997-2001 and Ruprechts-Karl-University Heidelberg in 2001-2003. Her research focuses on Russian and Polish literature and Russian Philosophy.

“Poetry as Political Participation”

Abstract:

This presentation examines the recent phenomenon of viral political poetry on YouTube. The key question is whether this poetico-political discourse features deliberative qualities in the sense of Jürgen Habermas's concept of public opinion. The subject of the case study is a poetic discourse field, which falls into the context

of the Russia-Ukraine crisis and constitutes its largest and most complex poetic discussion. The initial impulse came from the poem “We Will Never Be Brothers” posted by Anastasia Dmitruk on her Facebook page. The paper shows how the political discourse around Dmitruk’s poem on YouTube functions as a platform for public discussion. To a certain extent it meets the key criteria of public opinion formation: discursivity and configuration. Aesthetic devices, including self-referentiality, allow the participants to both elucidate their different positions and to provide them with complexity, multidimensionality and polydirectionality.

Prof. Alexander Kartoza



Ivane Javakhishvili Tbilisi State University, Georgia

Professor Kartoza's research focuses on Translation Studies, Caucasian Studies, Cultural Studies, Linguistics and Germanistics.

2013- Full Professor, Faculty of Humanities, Ivane Javakhishvili Tbilisi State University

2005-2012 Visiting Professor, Faculty of Cultural Studies, European University Viadrina Frankfurt (Oder)

1998-2004 Minister of Education of Georgia

1997-1998 Director of the National Library of Georgia

1989-1997 Head of the Chair of German Philology, Tbilisi State University

1986-1989 Researcher, Experimental Phonetics Laboratory, Tbilisi State University

Research Fellow of the Alexander von Humboldt Foundation (1994-1995; 2005)

Research Fellow of the Thyssen Foundation (2007-2008)

“The Linguistic Shaping and Re-shaping of the ‘Fantastic City’: The Georgian Cultural Scene in the First Third of the 20th Century”

Abstract:

Following the 1917 Revolution and the outbreak of the Civil War in Russia, many Russian artists found refuge in Georgia. The Georgian capital became a ‘Fantastic City’. The most influential Georgian author of that period, Grigol Robakidze, wrote in 1919: “Tiflis is pervaded by an aesthetical perception of the world. So was it in the past, and so it is again today. One can mention lots of names. ... All of them are united by the arts. People coming from different nations and cultures are brothers in art. We believe in that new International. Here in Tiflis must be laid the foundations for its construction.”

The literary life of the ‘Fantastic City’ took a multilingual form. The meaning of ‘multilingual’ is two-fold. On the one hand magazines and books appeared with texts in Georgian, Russian and Armenian, and some Georgian authors even wrote in Russian; on the other hand the so-called ‘Zaum language’ of Futurism developed, whose main aim was the alienation from ‘normal’ language.

After the occupation of Georgia by the Russian Red Army in 1921, the protest against the occupation and annexation led to a linguistic re-shaping of the cultural scene in the ‘Fantastic City’. Again in two respects: firstly all Georgian authors – including those who previously had tried to please their Russian colleagues by writing in Russian – now used only Georgian. Secondly, the futurist alienation from the ‘normal’ language was replaced by an archaic form.



Prof. Andreas Regelsberger

Trier University, Germany

Professor of Japanese studies at Trier University, Germany. Awarded Magister and PhD from Hamburg University, Germany in 2003 and 2008, respectively. After working for Hamburg University as a research and teaching assistant, joined Trier University as an academic member. Worked as visiting professor at Western Michigan University, Kalamazoo from 2012 to 2014. Returned to Trier University in 2014 as a professor. His research focuses on Japanese theater, pre-modern Japanese literature and contemporary Japanese poetry.

“Globalization of German and Japanese theater histories”

Abstract:

Both Germany and Japan have seen huge impacts through globalization in their respective theater traditions. Foreign tours of Japanese groups and actors but also the well-known Iwakura mission (1871-72) have fostered intercultural exchange and mutual interest in each other. Traditional Japanese theater forms like no and kabuki had a huge impact on Bertolt Brecht and others. Today, a growing number of international theater festivals are showing productions from all around the world. In my presentation I would like to underline modern and contemporary theater history of both countries, Germany and Japan, in order to highlight two special cases of a phenomenon which is recently being called "global theater histories".



(Chair)
Prof. Hiroko Masumoto

Kobe University, Japan

Dean of Graduate School of Humanities and professor of German studies at Kobe University. Awarded MA and PhD from Hiroshima University, Japan. Visiting Scholar with “Swiss Government Excellence Scholarships for Foreign Scholars” at Bern University, Switzerland from 1994 to 1995. After working at Himeji Dokkyo University, Japan, from 1987 to 2007, joined Kobe University as an academic member. Her research focuses on modern and contemporary German literature.

“Multiculturalism in Switzerland and “Spiritual National Defense” in the 1940s”

Abstract:

“Unity in Diversity” is not only the motto of the EU but also of Switzerland. Switzerland has a long tradition of multilingualism and multiculturalism because it was founded and developed as an alliance of rural and urban communes. This small country has 4 official languages, and 4 different cultures have lived together there peacefully for more than 700 years. Nowadays the Swiss want to see their country as a kind of model for the EU.

In the era of National Socialism, a political-cultural movement called “Spiritual national defense” was very active in Switzerland. Its aim was the protection of Swiss values and customs from totalitarian ideologies. There were two completely opposing tendencies in this movement: on the one hand people were exclusive nationalists and didn’t support any refugees from Nazi Germany who could bring different culture(s) to Switzerland; on the other hand they were tolerant of refugees because they thought multiculturalism was the most important Swiss value. In my presentation, I will analyze this unique phenomenon using the example of Schauspielhaus Zürich, the most important German-language theater which accepted actors, directors and playwrights from Germany and achieved great success due to their performance.

Migration and Security

(Chair)

Prof. Yoko Aoshima

Graduate School of Intercultural Studies, Kobe University, Japan

Associate Professor at Graduate School of Intercultural Studies, Kobe University, Japan. PhD in European History from Tokyo University in 2010. After working for the Slavic Research Center, Hokkaido University from 2006 to 2008, joined Faculty of Literature at Aichi University in 2011, and moved to Graduate School of Intercultural Studies, Kobe University in 2013. Her research focuses on Russian and East European history.



Prof. Tetsu Sakurai

Graduate School of Intercultural Studies, Kobe University, Japan

Tetsu Sakurai is Professor of Contemporary Jurisprudence at the Graduate School of Intercultural Studies, Kobe University. He is a legal philosopher, and his current research is focused on global justice and particularly on a tension between fundamental human rights and national membership in liberal democracies. His most recent articles include 'Can We Justify a Human Right to Democracy?', *Philosophy Study* 3 (2013), and 'Should Society Guarantee Individuals a Right to Keep 'Normal Functioning'? A Genetic Minimalist Approach in a Globalized World', in M. Albers, T. Hoffmann and J. Reinhardt eds., *Human Rights and Human Nature*, Springer, 2014. He also co-edited *Human Rights and Global Justice*, Franz Steiner, 2014.

“The Discrepancy between Citizenship and Economic Life in Contemporary Multiculturalizing Societies: What Charlie Hebdo Attacks Suggest to Us”

Abstract:

The recent waves of homegrown terrorism in advanced societies including Charlie Hebdo attacks and the November 2015 Paris attacks indicate that the possession of citizenship no longer guarantees that the possessors identify, feel a part of, or behave as if connected to the political community with which they are affiliated.

While nationalist discourses ascribe the unassimilability of people of Muslim origin to their irreducible cultural differences from French society, Todd argues that the pause in assimilation resulted from the choice of economic stagnation and social fragmentation by the French ruling classes.

An obvious discrepancy has now emerged between the legal and political doctrines of French mainstream society and actual social and economic life, which is driven by market processes. We should see the social integration of immigrants and their offspring not only as the outcomes of a legally constituted civic integration process, but also as an establishment of bright prospects in economic life for younger generations of immigrants. If we are not prepared to provide a favorable perspective for financial independence and socioeconomic achievement for socially disadvantaged young descendants of immigrants, the granting of citizenship alone cannot save them from bleak career prospects, particularly because they can easily be crushed by economic stagnation.



Prof. Sungwook HONG

Tokyo University of Foreign Studies, Japan

Born in Seoul, South Korea in 1982. Special Researcher of Tokyo University of Foreign Studies (TUFS) since 2016. Worked as Research Assistant at TUFS Institute of International Relations (TUFS-IIR) from 2011 to 2013. Awarded Master's Degree from TUFS (International Studies) in 2011, currently PhD candidate at TUFS. His research focuses on social business and NPOs in Japanese society, public space in East Asia.

“Is Refugee Acceptance in Japan Possible? – Considering Japanese Modern Society”

Abstract:

The refugee crisis and acceptance is becoming an important issue not only in Europe but also in East Asia. Japan has been pointed out for the low number of refugees it accepted in the global society. There are problems with the strict criteria of refugee recognition, and insufficient safety net from risks for applicants and the people waiting for reexamination. In recent years, however, the Japanese government seems to be getting closer towards protection of refugees' human rights such as implementation of resettlement, consideration of a broader understanding of the 'persecution' concept, permitting status of residence by 'humanitarian consideration' and expansion of social security.

On the other hand, this issue is related to the concept of 'fundamental human rights', which is made up of 'free individuals' of Western modernity. However, it is thought that Japanese society has organizations with several sociological characters as her basic social units, and every person is included in some kind of organization under the state of Japan. This phenomenon is observed even in current 'modernized' Japanese society, especially 'Public / Private' concepts greatly modified in the Japanese context. This presentation provides a sociological and anthropological consideration of Japanese society, introducing some samples of both domestic and alien groups appearing in it. It tries to provide preliminary issues which should be considered before discussing refugee acceptance and coexistence with aliens, including refugees, in Japanese society.



Prof. Christian Kaunert

Vrije Universiteit Brussel, Belgium

Prof. Dr. Christian Kaunert is Academic Director and Full Professor of European Politics at the Institute for European Studies, Vrije Universiteit Brussel. Previously, he served as a Full Professor of International Politics, Head of Discipline in Politics, University of Dundee and Director, European Institute for Security and Justice, Jean Monnet Centre for Excellence, University of Dundee. He was previously Marie Curie Senior Research Fellow at the European University Institute Florence, and Senior Lecturer in EU Politics & International Relations, University of Salford. Prof. Kaunert holds a PhD in International Politics & an MSc in European Politics from the University of Wales Aberystwyth, a BA (Hons) in European Business from Dublin City University, ESB Reutlingen and a BA (Hons) Open University. His research has a clear focus on the Global Security role of the EU, especially in the area of EU Justice and Home Affairs.



Prof. Sarah Leonard

Vrije Universiteit Brussel, Belgium

Prof. Dr. Sarah Léonard is Associate Dean for Research and Assistant Professor in International Affairs at Vesalius College, Vrije Universiteit Brussel. Prior to joining, she was a Senior Lecturer in Politics, University of Dundee, Lecturer in International Security at the University of Salford and Marie Curie Research Fellow at the Centre for European Studies of Sciences Po, Paris (France). She received her PhD in International Politics from the University of Wales, Aberystwyth. In 2010, she was a Visiting Research Fellow at the Institut Barcelona d'Estudis Internacionals (IBEI, Spain), and in 2015, a Visiting Research Fellow at the United Nations University (UNU-GCM) in Barcelona (Spain). She was Editor of the Journal of Contemporary European Research. She was also the coordinator of the Jean Monnet PhD Summer School on Security and Justice in Europe.

“Refugees, Security and the European Union”

Abstract:

The main aim of this paper is to analyse the extent and the modalities of the securitization of asylum-seekers and refugees in the European Union (EU). There is a commonly held view in the existing literature that migrants and asylum-seekers have been securitized in the EU, that is, have been socially constructed as security threats. This paper puts forward a more nuanced argument by analytically distinguishing the asylum policy of the EU from its policies on migrants and border controls on the basis of the literature on ‘venue-shopping’ and policy venues. It also makes a distinction between the EU asylum policy and the EU’s policy towards asylum-seekers and refugees. The paper argues that the development of the EU asylum policy, far from ‘securitizing’ asylum-seekers and refugees, has actually led to the strengthening and codification of several rights for these two categories of persons. However, so continues the argument, the securitization of irregular migration had led to a significant strengthening of border controls at the EU external borders, which, in turn, has made it more difficult for asylum-seekers and refugees to access the protection granted by asylum systems in the EU. Thus, security concerns have had mainly an indirect impact.



Prof. Kazunari Sakai

Graduate School of Intercultural Studies, Kobe University, Japan

Professor at the Graduate School of Intercultural Studies and Vice Director at the Center for International Education, Kobe University, Japan. Awarded MA from Tokyo University of Foreign Studies in 1994 and PhD from Kobe University in 2007. After working for the Ministry of Education of Japan and Tokyo Institute of Technology, he joined Kobe University as an academic member. His research focuses on the EU’s external relations with neighbouring countries, migration issues across the Mediterranean Sea, and global governance related to migration.

“Migration and Governance”

Abstract:

Tragedies and troubles through migration are serious matters in the contemporary world and it is obvious that we have to address this important issue as we see the grave crisis in the Mediterranean Sea, where a huge

number of refugees seek for somewhere to survive inside the EU at the risk of their lives. The EU has started harmonizing migration policies among member states since the mid-1990s, and tried to build an acceptance regime for immigrants from non-European countries; however, the Arab Spring since December 2010 exposed serious problems to be solved in Europe. We may say that the regional governance elaborated by the EU has found an insolvable dilemma between freedom and security through this crisis. I will first discuss the EU's treatments for recent migration problems and function and dysfunction of the regional governance of people's movement beyond borders, taking into account the importance of national governance and global governance.



(Discussant)
Prof. Christof Roos

Vrije Universiteit Brussel, Belgium

Christof Roos worked as research associate at University of Bremen (2007-2014) where he received his PhD in 2012. At Bremen International Graduate School for Social Sciences and the Collaborative Research Centre "Transformations of the State" he researched EU integration in Justice and Home Affairs. Currently he is Research Professor at the Institute of European Studies, VUB. His focus is on EU immigration politics as well as single market issues such as freedom of movement, Schengen cooperation, and the common European asylum system. Outside of academia Christof Roos worked for the European Commission's DG Joint Research Centre in Ispra (Italy) and as a policy advisor in the European Affairs Department of the city of Berlin.

(Chair)

Prof. Hisaya Kurashige

Kobe University, Japan



Prof. Laura Lopez-Honorez

Vrije Universiteit Brussel, Belgium

Junior research professor at Vrije Universiteit Brussel (VUB), Belgium. Awarded PhD from Universite Libre de Bruxelles (ULB), Belgium in 2007. After working in Madrid, ULB and Heidelberg as a PD, joined VUB as a research professor in 2012. Her research focuses on BSM physics, especially dark matter.

“Dark matter physics”

Abstract:

Dark matter (DM) annihilations into charged particles change the thermal history of the Universe and, as a consequence, affect the 21 cm signal. In my talk I will discuss how predicting the effect of DM strongly relies on the modeling of annihilations inside halos. Given current uncertainties on the description of the astrophysical processes driving the epochs of reionization, X-ray heating and Lyman- α pumping, we found in a recent work that disentangling DM signatures from purely astrophysical effects, related to early-time star formation processes or late-time galaxy X-ray emissions, will be a challenging task. We have concluded that only annihilations of DM particles with masses of ~ 100 MeV could leave an unambiguous imprint on the 21 cm signal and, in particular, on the 21 cm power spectrum. Additional measurements of the 21 cm signal at different cosmic epochs should help to break the strong parameter degeneracies between DM annihilations and astrophysical effects in order to undoubtedly single out a DM imprint for masses different from ~ 100 MeV.



Prof. Takatomi Yano

Kobe University, Japan

Specially appointed assistant professor at Department of Physics, Kobe University, Japan. Awarded MCs from Osaka University, Japan and PhD from Kobe University, Japan in 2007 and 2011, respectively. After working for the Super-Kamiokande experiment at Okayama University as a specially appointed assistant professor, joined Kobe University as an academic member for Hyper-Kamiokande project. His research focuses on neutrino physics in MeV energy region, such as solar and supernova

neutrinos.

“Neutrino physics at Super/Hyper-Kamiokande”

Abstract:

The very lightweight neutral elementary particle, neutrino, is quite an interesting existence in various scientific fields, i.e. particle physics and astrophysics.

Though it was originally regarded as massless in the standard model, several neutrino oscillation experiments proved the existence of their mass. Super-Kamiokande (SK), the world largest water Cherenkov detector in Japan, is one of the experiments which discovered the neutrino oscillation. Recently it also provided a noticeable indication of neutrino CP violation with the accelerator neutrino beam (T2K experiment). SK is also famous for the detection of the neutrinos from supernovae. The neutrino is one of the two possible probes for the core of supernovae, because none of the other particles can pass through the high-density structure of supernovae with the information, except for gravitational waves. The study of supernovae with neutrinos will provide significant knowledge for the heavy nuclei and the history of our universe.

In this presentation, I will show the history and the recent physics results of Super-Kamiokande. I will also introduce a successor project of SK, Hyper-Kamiokande (HK) and its physics potential. Both of the experiments will play a remarkable role in the future of neutrino physics.



Prof. Krijn De Vries

Vrije Universiteit Brussel, Belgium

Research fellow at Vrije Universiteit Brussel (VUB), Belgium.

Awarded PhD from the University of Groningen, the Netherlands in 2012.

After obtaining the PhD in Groningen, joined VUB as a research assistant.

His research focuses on astroparticle physics using the IceCube as well as future high-energy neutrino detectors.

“IceCube overview”

Abstract:

An overview of the IceCube neutrino telescope is presented. IceCube is a cubic kilometer in-ice Cherenkov detector built to detect high-energy cosmic neutrinos interacting in its vicinity. Recently IceCube discovered the high-energy cosmic neutrino flux opening the window to neutrino astronomy. Even though IceCube discovered cosmic neutrinos, their origin is still unknown. We discuss the implications of the IceCube results for possible neutrino sources and their link to the ultra-high-energy cosmic ray flux and dark matter. Along with these results, we also discuss future plans for the IceCube-Gen2 facility and several of its physics goals.



Prof. Yoshihito Gando

Tohoku University, Japan

Assistant professor at Research Center for Neutrino Science (RCNS), Tohoku University, Japan.

Awarded MSc from Tohoku University, Japan and received a Doctorate of Science from Tohoku University in 2004. After working for RCNS of Tohoku University as postdoctoral fellow and research associate, joined RCNS Tohoku University as an academic member. His research focuses on neutrino sciences.

“KamLAND-Zen”

Abstract:

Neutrinoless double beta decay search is a direct investigation for majorana neutrinos and lepton number violation. If the neutrino is a majorana particle, unnaturally light neutrino mass is explained and GUT scale physics is indicated through the see-saw mechanism. In the cosmology, the majorana property can be a proof of the matter dominant universe by leptogenesis theory.

KamLAND-Zen is one of the highest sensitivity neutrinoless double beta decay search experiments with Xe-136 based on the KamLAND (Kamioka Liquid Scintillator Antineutrino Detector). KamLAND-Zen 400 as the first phase of KamLAND-Zen project started in 2011 and ended in 2015.

We present the latest and the final results for the KamLAND-Zen 400 project. We also present the current status of the next phase (KamLAND-Zen 800), improvements from the last projects, and future plans.



Prof. Alberto Mariotti

Vrije Universiteit Brussel, Belgium

Junior professor at Vrije Universiteit Brussel (VUB), Belgium.

Awarded PhD from Milano-Bicocca University, Italy in 2007.

After working in Saclay, VUB and Durham as a PD, joined VUB as an academic member in 2016.

His research focuses on BSM physics in the theoretical and phenomenological point of views.

“Beyond-Standard-Model physics at the LHC”

Abstract:

I will review the status of BSM physics after the new results of the LHC, focusing on SUSY scenarios. I will show the current main challenges faced by standard SUSY models and I will discuss unconventional realizations of SUSY, their advantages and their main phenomenological signatures.



Prof. Junpei Maeda

Kobe University, Japan

Special Appointment Assistant Professor at Organization for Advanced and Integrated Research, Kobe University, Japan. Awarded MSc and PhD from Tokyo Institute of Technology, Japan in 2006 and 2009, respectively. After working for the Double Chooz reactor neutrino experiment at Tokyo Metropolitan University as a JSPS research fellow, joined Kobe University as an academic member, and the ATLAS collaboration at LHC, CERN. Currently works on the operation and upgrades of the ATLAS Level-1 muon trigger

system. His research also focuses on new physics searches by top-quark resonance.

“Exotic physics searches in the ATLAS experiment”

Abstract:

The LHC is running on Run-2 since 2015 at a centre of mass energy of 13 TeV, the ATLAS detector has taken data efficiently, and the integrated luminosity is achieving approximately 30 fb⁻¹. The new energy opens a large window of searches for particle physics beyond the Standard Model. In this talk, I will present the current status of the ATLAS experiment, then recent results on exotic searches for resonance decaying vector bosons or fermions, of which the excess directly indicates the new phenomena.



Prof. Freya Blekman

Vrije Universiteit Brussel, Belgium

Professor at Vrije Universiteit Brussel (VUB), Belgium.

Awarded PhD from University of Amsterdam, Netherlands in 2005.

After working in London and Cornell as a PD, joined VUB as an academic member in 2013.

Her research focuses on top physics as a CMS member.

“CMS overview”

Abstract:

The CMS experiment at CERN is one of the two general purpose experiments at the Large Hadron Collider (LHC). After an upgrade of both the accelerator and parts of the detector, the LHC restarted in 2015 at an increased beam energy providing proton-proton collisions at $\sqrt{s}=13$ TeV. The CMS collaboration uses this data for a varied physics programme, ranging from Heavy Ion physics, diffractive Quantum-Chromodynamics, and Standard Model physics precision measurements including studies of the Standard Model scalar boson, to a very diverse set of searches for new particles predicted by physics beyond the SM.

In this presentation I will overview recent results from the CMS physics programme, with a focus on results relevant for the audience of this workshop.

(Discussant)

Prof. Kentarou Mawatari

LPSC Grenoble, France