IAS NEWSLETTER

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Merry Christmas

Event Summary

❶ IAS: Team Visit to N21 and N22

Led by Prof. Yu Xingzhong, the Director of the IAS, a 12-member team visited the State Key Laboratories and research centres/institutes in N21 and N22 on November 14, 2022, with the aim of understanding the current scientific research development of UM and promoting interdisciplinary research collaborations within the university.

The team was warmly welcomed by the units visited, including Center for Cognitive and Brain Sciences (CCBS), Center of Data Science (CDS) and Intelligent Supercomputing Center (SICC) of the Institute of Collaborative Innovation (ICI), State Key Laboratory of Analog and Mixed-Signal VLSI (SKL-AMSV), State Key Laboratory of Internet of Things for Smart City (SKL-IOTSC), Institute of Chinese Medical Sciences of the University of Macau (SKL-ICMS) and the Frontier Science Center for Precision Oncology of the Ministry of Education. The unit representatives gave a presentation on their research development and showed the

team the outcome of their research achievements. The team learned more about their research efforts in the areas of brain sciences, artificial intelligence, big data studies, smart sensing, smart energy, intelligent transport, public safety, disaster prevention, Chinese medical sciences, and anti-cancer research.

This exchange activity provided the fellows and the team inspiration and possibilities from which they have identified a point of convergence with their own discipline research. They will explore topics that integrate humanities and sciences, promoting cross-discipline dialogue and potential collaborations in the future.

❷ IAS 4th Cross-disciplinary Dialogue Meeting

The 4th Cross-disciplinary Dialogue Meeting was held on 15 November 2022. In this regular luncheon meeting, Prof. Rob Law shared his research work titled "What Makes an Article Citable?".

Prof. Law first used the algorithm of the 2023 World University Ranking to lead everyone to think about citation and impact factor: what makes an article citable? Based on the literature review, Prof. Law pointed out that citation and word limit have a negative relationship. The longer the article, the lower the citation. On the contrary, the reference list and number of authors and collaboration have a positive relationship with citation. Through statistical analysis of data, Prof. Law emphasized, "The more word in a title, the less likely it will be cited. A short title can indeed increase the number of citations."

In addition, publishing papers with prolific authors, international collaboration, length of related elements, etc. have a suggested paper standard: 2 geographically similar authors, 6,400 words manuscript, 4 keywords, 3 tables, 56 references and a title with no more than 4 words. The topic was hotly discussed among the fellows regarding the research evaluation approaches and citation databases, and they also exchanged views on research performance strategies.

The IAS team and fellows from various faculties attended the luncheon meeting, including Prof. Wong Seng Fat, Alfred (FST), Prof. Liu Jianhong (FLL), Prof. Zhang Yue (FAH), Prof. Hans-Georg Moeller (FAH), Prof. Ung Oi Lam, Carolina (ICMS), Prof. Wu Man Sze Anise (FSS), Prof. Xingzhong Yu (FLL/IAS).

❸ 2022-2023 IAS 3rd Lecture on Frontiers in Humanities
Digital Literacy: From Algorithmic Society to Web 3.0

The third Lecture on Frontiers in Humanities organized by IAS was successfully held onsite and online on 18 November 2022 (Friday). Prof. Yu Xingzhong, Director of the IAS, Chair Professor in the Department of Global Legal Studies, FLL, spoke on the topic "Digital Literacy: From Algorithmic Society to Web 3.0". Prof. Lin Shaoyang, Head of Academic Programme and Publication of IAS, Distinguished Professor in the Department of History, FAH, was the moderator.

Prof. Yu first introduced the components of digital literacy, including creativity, critical thinking and evaluation, cultural and social understanding, collaboration, the ability to find and select information, effective communication, e-safety and functional skills. The technology and awareness of digital literacy include mastery of basic digital technologies and full awareness of the social consequences of the application of digital technologies.

Prof. Yu pointed out that, in fact, we already live in an algorithmic society. Although machine learning algorithms can stimulate innovation and production growth, we must also pay attention to the problem of inequality brought about by algorithms. The requirements of the algorithmic society for people's scientific and technological quality are very high, and it is difficult to adapt without a considerable level of education; some are forced to become idlers.

Finally, he discussed the Metaverse and Web 3.0. The Metaverse is constructed on the basis of human nature of Playfulness, Gambling and Profit-seeking, its essence could be described as the Eden of game capitalism. Web 3.0 does not solve the problems of Web 2.0. Whether it is consumers' expectations for privacy or the maintenance of the network order, Web 3.0 fails to give an answer.

The topic was hotly discussed among the audience, and they exchanged views regarding the attitudes facing Web 3.0 and the challenges towards building Web 3.0. Around 150 participants signed up for the event, including professionals, students, alumni, and external audience. The event effectively promoted academic dialogue and boosted the intellectual atmosphere on UM campus.

❹ 2022-2023 1st IAS Author Meets Readers Series
The EU Artificial Intelligence Act | Regulating Subliminal AI Systems

The first Author Meets Readers Series by IAS was successfully held online on Friday, 25 November 2022. Prof. Rostam J. Neuwirth, a Senior Research Fellow of IAS, Head of the Department for Global Legal Studies, FLL, shared his research achievements in his book entitled "The EU Artificial Intelligence Act——Regulating Subliminal AI Systems". Prof. Yu Xingzhong, Director of IAS, Chair Professor in Global Legal Studies, FLL, moderated the talk.

Prof. Neuwirth first introduced the term artificial intelligence as an oxymoron from the perspective of the psychology of intelligence. Intelligence, by nature, cannot be artificial and its inestimable complexity defies any notion of artificiality. He then discussed the role of subliminal AI as a game changer. AI is evolving so fast that if we do not control our minds, someone else will likely control our minds for us. We need to recognize the profound and dynamic positive and negative impacts of artificial intelligence.

From a legal point of view, freedom of thought is a fundamental human right. In the age of neuroscientific insights and interventions, it is particularly important. Professor Neuwirth reconstructs the scope and meaning of this forgotten right in the book and proposes four principles for its interpretation. Professor Neuwirth discussed "neuro crimes" which refer to criminal activities that involve neural information. Brain hackers can figure out private information such as banking information, recognized faces, and PINs. This type of attack can also be performed subliminally, without the conscious awareness of the target. Finally, he suggested that we need to strengthen the regulation of AI, especially regulating subliminal AI systems.

Prof. Serge Stinckwich (Head of Research at the United Nations University Institute in Macau) and Prof. Zhang Xin (University of International Business and Economics in Beijing) served as the commentators at the book launch ceremony.

Prof. Zhang considered the book applies a very comprehensive and fundamental perspective to understanding AI and AI regulations. Prof. Stinckwich addressed the impact of digital technologies, particularly, artificial intelligence science, from both individual and collective perspectives. The two professors also exchanged ideas on how AI influences humans from the views of materialism and spiritual life and further discussed the fundamental elements of shaping the future regulatory framework.

The topic has raised a hot discussion and they also exchanged views on AI and AI regulations, digital technologies and artificial intelligence science. To comply with the epidemic prevention policy, this lecture was arranged online via Zoom.

Upcoming Events

4th Lecture on Frontiers in Humanities	
Speaker:	Prof. Lee Tien Tsung, Department of Communication, FSS
Topic:	Does Popular Music Reflect Economic and Social Conditions? An Analysis of Cantopop from 1978 to 2020
Moderator:	Prof. Lai Neng Rose, Department of Finance and Business Economics, FBA
Date:	20 January, 2023 (Friday)
Time:	3:00 – 5:00 pm
Participation mode:	Lecture Hall (E34-G011) and Online via Zoom
Language:	English / Chinese

5th Lecture on Frontiers in Humanities	
Speaker:	Prof. Liu Jianhong, Department of Global Legal Studies, FLL
Topic:	Asian Criminology – the Concept and Paradigm
Moderator:	Prof. Xu Jianhua, Department of Sociology, FSS
Date:	10 February, 2023 (Friday)
Time:	3:00 – 5:00 pm
Participation mode:	Lecture Hall (E34-G011) and Online via Zoom
Language:	English / Chinese