

## **Blockchain Kaigi 2022, BCK22 Program (ver.10, 19/07/2022)**

### **Aug. 4<sup>th</sup> Morning**

#### **Opening Remarks (9:00-9:10)**

Yuichi Ikeda (Kyoto University)

#### **Invited Talks (9:10-10:40) SC: Yuichi Ikeda (Kyoto University)**

(I1) Aniket Kate (Purdue University, Supra Oracles) [35 min Online Talk, 10 min Q&A]

“Distributed IOweYou Credit Networks: Possibilities and Challenges”

(I2) Dorit Aviv (University of Pennsylvania) [35 min Online Talk, 10 min Q&A]

“Incentivizing sustainability with a blockchain-sensor network”

#### **General Talks (10:40-12:00) SC: Yoshimasa Hidaka (KEK)**

(G1) Daniel Harrell (University of Texas) [15 min Online Talk, 5 min Q&A]

“Improving patient data liquidity and medical information sharing with liveness confirmation using self-sovereign identity”

(G2) Yuichi Ikeda (Kyoto University) [15 min Talk, 5 min Q&A]

“Energy Trading System EDISON using the XRP Ledger”

(G3) Kazuta Takahashi (Miyagi Prefectural Forestry Technology Institute) [15 min Talk, 5 min Q&A]

“The practice of DX in forestry and wood industry -Creation of new value by blockchain system-”

(G4) Thiago Negrão Chuba (Kyoto University) [15 min Online Talk, 5 min Q&A]

“A new panorama for Intellectual Property: The benefits and challenges of Blockchain”

Lunch Break [75 min] Submission Instructions for Proceedings shown on Screen

### **Aug. 4<sup>th</sup> Afternoon**

#### **Business Session (13:15-15:15) (In Japanese) SC: Emi Yoshikawa (Ripple Lab Inc)**

(13) Mamoru Fujimoto (SBI Holdings, Inc.) [30min Talk in Japanese]

“Blockchain implementation started from financial use cases and now extends to non-financial use cases”

(14) Hidehiko Tanaka (NTT Data Corporation) [30min Online Talk in Japanese]

“TBD”

(15) Keisuke Yamane (Accenture Japan Ltd.) [30min Talk in Japanese]

“The future of Metaverse Continuum and Web3”

Discussion [30min in Japanese]

[15 min break]

#### **General Talks (15:30-16:30) SC: Tetsuo Hatsuda (Riken)**

(G5) Abhijit Chakraborty (Kyoto University) [15 min Talk, 5 min Q&A]

“Correlation tensor spectra of XRP transaction networks”

(G6) Masanori Yamanaka (Nihon University) [15 min Talk, 5 min Q&A]

“Comparison of statistical properties of price fluctuations of cryptocurrencies and stock prices”

(G7) Hideaki Aoyama (Kyoto University) [15 min Talk, 5 min Q&A]

“Global distribution of Crypto asset traders”

#### **Invited Talks (16:30-18:00) SC: Hideaki Aoyama (Kyoto University)**

(I6) Claudio J. Tessone (University of Zurich) [35 min Online Talk, 10 min Q&A]

“TBD”

(17) Ginestra Bianconi (Queen Mary University of London) [35 min Online Talk, 10 min Q&A]  
“Higher-order networks: topology and dynamics”

### **Aug. 5<sup>th</sup> Morning**

#### **Keynote Session (9:00-10:00) SC: Yuichi Ikeda (Kyoto University)**

(K1) Vitalik Buterin (Co-founder of Ethereum) [30min Online Talk]

(K2) David Schwartz (CTO at Ripple Lab Inc) [30min Online Talk]

#### **Invited Talks (10:00-10:45) SC: Yuichi Ikeda (Kyoto University)**

(I8) Masaki Bessho (Bank of Japan) [35 min Talk, 10 min Q&A]  
“Central Bank Digital Currencies: Motivations, Technologies, and Policy Considerations”

#### **General Talks (10:45-11:45) SC: Hideaki Aoyama (Kyoto University)**

(G8) Yuji Aruka (Chuo University) [15 min Talk, 5 min Q&A]  
“The role of money by Frederic Soddy, Nobel Laureate in chemistry in 1922”

(G9) Taisei Kaizoji (International Christian University) [15 min Talk, 5 min Q&A]  
“Foundation of Econophysics”

(G10) Irena Vodenska (Boston University) [15 min Online Talk, 5 min Q&A]  
“Blockchain and Cryptocurrency Interface with the Global Economy”

Lunch Break [75 min] Submission Instructions for Proceedings shown on Screen

### **Aug. 5<sup>th</sup> Afternoon**

#### **Invited Talks (13:00-14:30) SC: Yoshimasa Hidaka (KEK)**

(I9) Tomoyuki Shirai (Kyushu University) [35 min Talk, 10 min Q&A]

“Persistent homology and its applications”

(I10) Naoki Masuda (University at Buffalo) [35 min Talk, 10 min Q&A]

“State dynamics view of temporal network data: Recurrence and embedding”

[15 min break]

**General Talks (14:45-17:05) SC: Tetsuo Hatsuda (Riken)**

(G11) Akihiro Fujihara (Chiba Institute of Technology) [15 min Talk, 5 min Q&A]

“Theoretical Considerations on Bitcoin Block Size Distribution”

(G12) Hiroshi Uehara (Risho University) [15 min Talk, 5 min Q&A]

“Acquiring Semantic Mode Signal from Tweets of #Crypto Currencies – A trial of detecting semantic direction from high dimensional word vector space with sparsity –”

(G13) Hiromitsu Goto (Kanazawa Gakuin University) [15 min Talk, 5 min Q&A]

“Multilayer Network Analysis for Industrial Supply Chains of Japanese Prefecture”

(G14) Yoshi Fujiwara (University of Hyogo) [15 min Talk, 5 min Q&A]

“Network Analysis of Bitcoins Transactions among Big Players”

(G15) Yuichi Ikeda (Kyoto University) [15 min Talk, 5 min Q&A]

“Hodge Decomposition of the Remittance on the XRP ledger”

(G16) Yoshimasa Hidaka (KEK) [15 min Talk, 5 min Q&A]

“Flow frequency, price bubble and its collapse in Bitcoin and XRP”

(G17) Akira Fukata (NEC Solution Innovators, Ltd.) [15 min Talk, 5 min Q&A]

“Creating new value with Blockchain Technology”

**Invited Talks (17:05-17:50) SC: Emi Yoshikawa (Ripple Lab Inc)**

(I11) Hitoshi Okada (National Institute of Informatics) [35 min Online Talk, 10 min Q&A]

“Aspects of research on the structural characteristics and institutional challenges of Decentralized Autonomous Organizations”

**Closing Remarks & Submission Instructions for Proceedings (17:50-18:05)**

Hideaki Aoyama (Kyoto University)