# Blockchain Kaigi 2023 (BCK23) Program (Tentative version for Oct 5)

The Integrated Innovation Building (IIB) at the RIKEN Kobe Campus. October 28th -29th, 2023

# October 28th (Sat) Morning

## Opening Remarks (9:00-9:05)

Yuichi Ikeda (Kyoto University)

#### Announcement of Proceedings (9:05-9:10)

Tetsuo Hatsuda (RIKEN iTHEMS)

## Keynote Speech 10/28 (9:10-9:50) SC1

(K1) Aanchal Malhotra (Ripple Lab Inc.) [30 min Talk, 10 min Q&A] "(TBD)"

# Invited Talks (9:50-11:10) SC2

- (I1) Victor Fang (AnChain.AI) [30 min Talk, 10 min Q&A]
- "How Artificial Intelligence Disrupts Status Quo of Web3 Security"
- (I2) Tsuyoshi Ide (IBM Thomas J. Watson Research Center) [30 min Talk, 10 min Q&A] "(TBD)"

## General Talks (11:10-12:00) SC2

- (G1) Claudio J. Tessone (University of Zurich) [15 min Talk, 10 min Q&A]
- "Deceptive Trading in Decentralised Finance and NFT Markets: A blockchain analytics approach"
- (G2) Hideaki Aoyama (Kyoto University) [15 min Talk, 10 min Q&A]
- "Where are the Cryptoasset nodes located? -Eye-Map identification of the longitude of nodes-"

Lunch break (12:00-13:30)

## October 28th (Sat) Afternoon

## Invited Talk (Company Session in Japanese) (13:30-14:30) SC3

(I3) Syuga Yamamoto (Gaiax Co.Ltd) [20 min Talk, 10 min Q&A]

「日本に馴染む DAO の形」

(I4) Mayu Yokoyama (Nippon Yusen Kabushiki Kaisha) [20 min Talk, 10 min Q&A] 「(TBD)」

# General Talks (14:30-14:55) SC3

(G3) Ryosuke Nakazawa (Chiba Institute of Technology) [15 min Talk, 10 min Q&A] "Proposal of fact-checking DAO and its experimental trials"

## Break (14:55-15:15)

#### General Talks (15:15-16:55) SC4

- (G4) Shinya Hirata (Kyushu University) [15 min Talk, 10 min Q&A]
- "Bitcoin Transactions Stochastic Model Simulation"
- (G5) Zheng Nan (Yamanashi Gakuin University) [15 min Talk, 10 min Q&A]
- "How did bitcoin markets evolve: A comparison with the USD/EUR foreign exchange spot market?"
- (G6) Abhijit Chakraborty (Kyoto University) [15 min Talk, 10 min Q&A]
- "Dynamic relationship between XRP price and correlation tensor spectra of the transaction network"
- (G7) Yaser Sabzevari (Isfahan University of Technology) [15 min Talk, 10 min Q&A]
- "Applications of Blockchain for Solving Hydrological Improves: A Review"

## October 29th (Sun) Morning

Keynote Speech (9:00-9:40) (Online, West Coast: 28th 16:00, East Coast: 28th 20:00) SC5 (K2) Wakefield Scott Stornetta (Creative Destruction Lab) [30 min Talk, 10 min Q&A] "(TBD)"

#### Invited Talks (9:40-10:20) SC5

- (I5) Hiroyoshi Miwa (Kwansei Gakuin University) [30 min Talk, 10 min Q&A]
- "Developing human resources capable of using blockchain technology"

## General Talks (10:20-11:35) SC6

(G8) Po-Chun Kuo (1BTQ Technologies Corp) [15 min Talk, 10 min Q&A]

"POScale: A post-quantum signature aggregation algorithm"

(G9) Gopikrishnan Muraleedharan (Macquarie University) [15 min Talk, 10 min Q&A]

"Proof-of-work consensus by quantum sampling"

(G10) Tsuyoshi Hirayama (IBM Japan, Ltd.) [15 min Talk, 10 min Q&A]

"Breakthrough of Crypto Currency Derivatives and Quantum Finance Utilization"

#### Lunch break (11:35-13:05)

# October 29th (Sun) Afternoon

## Invited Talk (13:05-15:05) SC7

(I6) Shoji Kasahara (Nara Institute of Science and Technology) [30 min Talk, 10 min Q&A]

"Modeling and Analysis of Bitcoin Mining Mechanism -A Queueing Theoretical Approach-"

(I7) Wang Qin (CSIRO) [30 min Talk, 10 min Q&A]

"Tokenomics and Beyond"

(I8) Shingo Fujimoto (Data & Security Research laboratory, Fujitsu Limited.) [30 min Talk, 10 min O&A]

"(TBD)"

## General Talks (15:05-15:30) SC7

(G11) Akihiro Fujihara (Chiba Institute of Technology) [15 min Talk, 10 min Q&A]

"Investigating the probability distribution of average block time in proof-of-stake consensus algorithm using extreme value theory"

# Break (15:30-15:50)

#### General Talks (15:50-16:40) SC1

(G12) Masaki Sakurai (Chiba Institute of Technology) [15 min Talk, 10 min Q&A]

"Proposal of Fact-Checking Registry using Bitcoin SV"

(G13) Yu Kimura (Interoperability Labs Ltd.) [15 min Talk, 10 min Q&A]

"Theory of EDISON-X order automation using several machine learning approaches"

# Closing Remark (16:40-16:45)

Tetsuo Hatsuda (RIKEN iTHEMS)

# Session Chairs

SC1: Yuichi Ikeda (Kyoto University)

SC2: Tetsuo Hatsuda (RIKEN iTHEMS)

SC3: Akihiro Fujihara (Chiba Institute of Technology)

SC4: Claudio J. Tessone (Univ. of Zurich)

SC5: Tomoyuki Shirai (Kyushu University)

SC6: Yoshimasa Hidaka (KEK Theory Center)

SC7: Abhijit Chakraborty (Kyoto University)