

2026 IEEE International Conference on Blockchain and Cryptocurrency (ICBC 2026)

**Brisbane, Australia
1-5 June 2026**

IEEE Catalog Number:
ISBN:

CFP26BLO-POD
979-8-3315-8634-8



Copyright © 2026, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	CFP26BLO-POD
ISBN (Print-On-Demand):	979-8-3315-8634-8
ISBN (Online):	979-8-3315-8633-1
ISSN:	2832-8892

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA

Phone:	(845) 758-0400
Fax:	(845) 758-2633
E-mail:	curran@proceedings.com
Web:	www.proceedings.com

TABLE OF CONTENTS

ICBC 2026 Placeholder Page	1
Measuring Memecoin Fragility	2
<i>Yuxin Xiang, Qishuang Fu, Yuquan Li, Qin Wang, Tsz Hon Yuen, Jiangshan Yu</i>	
AMMs in Tokenized Real-World Asset Markets: A Market Functionality and Sustainability Assessment	7
<i>Zhonghao Liu, H.M.N. Dilum Bandara, Hye-Young Paik</i>	
Stablecoins as Dry Powder: A Copula-Based Risk Analysis of Cryptocurrency Markets	12
<i>Elliot Jones, Toshiko Matsui, William Knottenbelt</i>	
Trustless RWA Pricing via Verifiable Inference and Decentralized Model Governance	17
<i>Zhenhang Shang</i>	
Fairness-Revenue Trade-offs in Ethereum Execution Tickets: An Empirical Game-Theoretic Analysis	22
<i>Yanzhen Li, Zining Wang</i>	
Dynamic Fee Control under Competitive Routing in Concentrated-Liquidity Automated Market Makers	27
<i>Tran Cat Khanh, Van-Linh Nguyen</i>	
FinML-Chain: A Blockchain-Integrated Dataset for Enhanced Financial Machine Learning	32
<i>Jingfeng Chen, Wanlin Deng, Dangxing Chen, Luyao Zhang</i>	
An Explainable Ensemble Framework for Ethereum Fraud Detection Using SHAP-Based Interpretations	38
<i>Assal Aminian, Zining Wang</i>	
Anchor-Centered Multi-View Learning for Risk-Aware and Budget-Constrained Bitcoin Fraud Investigation	43
<i>Hai-Nam Vu, Dang Viet Khoa Do, Minh-Chau Ngo, Minh-Ha To, Ha-Manh Hung, Thi Thanh Thuy Pham</i>	
Harvesting Crypto Vulnerability Intelligence for State Sponsored Crypto Offensives: Integrating Machine Learning, Blockchain and Social Network Analysis for SARs Regulatory Reporting	48
<i>James Usher</i>	
Who Should Represent Me? Similarity-Based Recommender Systems for Vote Delegation in DAOs	52
<i>Aryan Kaushik, Jan Droll</i>	
Can Social Sentiment Improve Bitcoin Dollar-Cost Averaging? Evidence from VADER and CryptoBERT	57
<i>Hsiu Yuan Liang, Jyh-Shing Roger Jang, Ming-Hua Hsieh, Chien-Ping Chung</i>	
Usage-Aware Function Dispatch for Smart Contracts	62
<i>Christian René Sechting, Jonathan Heiss, Axel Küpper</i>	
On-chain Smart Contract Product Lines via the Diamond Pattern	67
<i>Jan Gorzny, Martin Derka</i>	
AT-Selection: An Efficient Broker Selection Strategy in Sharded IoT-Blockchain System	72
<i>Yue Su, Yang Xiang, Kien Nguyen, Hiroo Sekiya</i>	

Scaling the Lightning Network with Practical Set Reconciliation	76
<i>Xingyu Chen, Anish Sinha, David Starobinski, Ari Trachtenberg</i>	
Finite-Queue Bitcoin Transaction-Confirmation Time Modelling	81
<i>Jing Yee Tan, Yuqiao Zhao, Wai-Ki Ching</i>	
Social Capital Consensus for Blockchains: Exploring Design Options for Replacement of Proof-of-Stake by Social Influence	86
<i>Juraj Mariani, Ivan Homoliak</i>	
Availability-Aware Reinforcement Learning for Validator Scheduling in Proof-of-Stake Blockchains	91
<i>Christopher G. Harris</i>	
How Much is Decentralization of Ethereum PoS Adversely Affected by Verifier's Dilemma and Staking Pools under Realistic Operational Costs?	96
<i>Ivan Homoliak, Martin Hrubý, Martin Perešíni, Kristián Košťál, Daria Smuseva</i>	
When Feed Replace Rewards: Mining Incentives and Consensus Stability in Bitcoin's Fee-Dominant Regime	101
<i>Robin Hany, Benjamin Kraner, Claudio J. Tessone</i>	
Incentive Incompatibility of High-Bandwidth Mode in Bitcoin's Compact Block Relay	106
<i>Yuito Ueda, Akira Sakurai, Kazuyuki Shudo, Taishi Nakai</i>	
Governance-Aware Lightweight Consensus for Industrial IoT and Cyber-Physical Systems	111
<i>Jae Woo Kim, Hamza Ibrahim, Love Allen Chijioke Ahakonye, Jae Min Lee, Dong-Seong Kim</i>	
Formal Security Analysis of SATP and Its Enhancement for Untrusted Gateways	116
<i>Iifan Tyou, Kanta Matsuura</i>	
EVMAuth: Decentralized Authorization as Programmable Assets for Web3 APIs and Autonomous Agents	121
<i>Bhargav Chickmagalur Nanjundappa</i>	
LPOR: A Layered Proof of Reserves Framework for Usable and Publicly Auditable Solvency Verification	125
<i>Donggoo Kim, Rajesh Upadhayaya, Milosz Bator, Tao Le</i>	
Auditable Privacy: A Purpose Bound Money Protocol with Mandatory Viewing Key Delegation via Zero-Knowledge Proofs	130
<i>Shunsuke Hirata, Yoshihiro Kawahara</i>	
BurstFlow: A Utilization-Aware Consensus Mechanism for Agentic Blockchain Networks	135
<i>Gifar Arif Haryadi, Muhammad Rasyid Redha Ansori, Jae-Min Lee, Dong-Seong Kim</i>	
Detached-PQ: A Validator-Push Hybrid Transaction Framework for Storage-Efficient PoS Blockchains	138
<i>Duc Van Nguyen, Cat Khanh Tran, Po-Ching Lin, Van-Linh Nguyen</i>	
Chain Reactions: How Nonce Collisions in ECDSA Compromise Polygon MEV Searchers	141
<i>Yash Madhwal, Andrey Seoov, Raffaele Della Pietra, Anastasiia Smirnova, Yuri Yanovich</i>	
Reduced-State ZK-STARK Verification for Granular NFT Metadata Privacy	144
<i>Josiah Ayoola Isong, Oroceo Paul Angelo, Paul Michael Custodio, Lee Jae Hyun</i>	
<i>Simeon Okechukwu Ajakwe Smieeee, Jae-Min Lee, Dong-Seong Kim Smieeee</i>	

On the Bandwidth Consumption of Blockchains	147
<i>Andrei Lebedev, Vincent Gramoli</i>	
Protocol Driven Dynamics of the Bitcoin Peer-to-Peer Network under Churn	156
<i>Yu Gao, Matija Piškorec, Claudio J. Tessone</i>	
Non-Monotonic Effects of Node Churn on Block Synchronization in Bitcoin	165
<i>Yu Gao, Matija Piškorec, Claudio J. Tessone</i>	
Pricing Innovation Under Latency Constraints: A Mean-Field Analysis of Coded Payload Delivery	174
<i>Muriel Médard, Tarun Chitra, Moritz Grundei, Sajida Zouarhi</i>	
Demo paper: Royalty Distribution Models for Referable NFT	182
<i>Ruiqiang Li, John Le, Brian Yecies, Qin Wang, Shiping Chen</i>	
Demo: EdgeConsent: On-Chain Attribute-Based Access Control for Data Consent Management	184
<i>Anthony Uchenna Eneh, Love Allen Chijioke Ahakonye, Jae Min Lee, Dong-Seong Kim</i>	
Offline Bitcoin: An Air-Gapped Protocol for Trustless Bitcoin Transactions	186
<i>Dong-Seong Kim, George Chidera Akor, Collins Okafor, Josiah Isong, Victor Ikenna Kanu Ikechi Saviour Igboanusi</i>	
Equilibrium: Preventing Arbitrage Attacks in Optimistic Rollups	189
<i>Margarita Capretto, Martín Ceresa, Hannes Kallwies, César Sánchez</i>	
Elmo: Recursive Virtual Payment Channels for Bitcoin	199
<i>Aggelos Kiayias, Michael Schaller, Orfeas Stefanos Thyfronitis Litos</i>	
ZkChainDB: A Verifiable and Privacy-Preserving SQL Query Engine for Off-Chain Database Using zk-SNARKs and Blockchain	208
<i>Lulu Li, Wei Wang, Jianan Hong, Jing Fu, Junyu Wang</i>	
A Decentralized Sequencer and Data Availability Committee for Rollups Using Set Consensus	217
<i>Margarita Capretto, Martín Ceresa, Antonio Fernández Anta, Pedro Moreno-Sanchez, César Sánchez</i>	
IIoT LAVA-Chain: Protocol-Aware, Gas-Free IoT Blockchain with Adaptive Validator Optimization	226
<i>Kalibbala Jonathan Mukisa, Dong-Seong Kim, Jae Min Lee</i>	
Smart Contract Vulnerability Detection Empowered by LLM: Can It Really Work?	228
<i>Yuxuan Zhou, Kunsong Zhao, Xiapu Luo, Yuzhe Tang</i>	
Audit-or-Cast: Enforcing Honest Elections with Privacy-Preserving Public Verification	231
<i>Aman Rojjha, Gaurang Tandon, Varul Srivastava, Kannan Srinathan</i>	
Leveraging Large Language Models for Sentiment Analysis: Multi-Modal Analysis of Decentraland's MANA Token	234
<i>Xintong Wu, Peiting Tsai, Jing Yuan, Michael Yu, Greg Sun, Luyao Zhang</i>	
SoK: Stablecoins in Retail Payments	240
<i>Yuquan Li, Yuexin Xiang, Qin Wang, Tsz Hon Yuen, Andreas Deppeler, Jiangshan Yu</i>	
SoK of RWA Tokenization: A Systematization of Concepts, Architectures, and Legal Interoperability	261
<i>Junliang Luo, Xihan Xiong, Zonglun Li, Hong Kang, Xue Liu, William J Knottenbelt, Katrin Tinn</i>	
SoK: Impermanent Loss, An Unavoidable Fee or a Controlled Phenomenon?	281
<i>Arad Kotzer, Ori Rottenstreich</i>	

SoK: Preconfirmations	295
<i>Quentin Botha, Demetris Kyriacou, Conor McMenamin, Lin Oshitani, Aikaterini-Panagiota Stouka</i>	
SoK: Speedy Secure Finality for Ethereum	314
<i>Abhimanyu Nag, Yash Saraswat</i>	
On the Centralization of Governance Power in Decentralized Autonomous Organizations	328
<i>Vabuk Pahari, Balakrishnan Chandrasekaran, Johnnatan Messias, Krishna P. Gummadi, Abhisek Dash</i>	
MVF-Composer: Trust-Weighted Controller for Stress-Resilient Stablecoin Reserves	338
<i>Shengwei You, Aditya Joshi, Andrey Kuehlkamp, Jarek Nabrzycki</i>	
ZADKIEL: Zero-Knowledge Agentic Defense Kernel for Integrity Enforcement Logic	347
<i>Allwinnaldo, Muhammad Rasyid Redha Ansori, Jae-Min Lee, Dong-Seong Kim</i>	
RegGuard: Legitimacy and Fairness Enforcement for Optimistic Rollups	350
<i>Zhenhang Shang, Yingzhe Yu, Kani Chen</i>	
BARS: A Blockchain-Anchored System for rPPG-Based Biometric Verification	352
<i>Lu Niu, Patrick Flynn</i>	
Breaking Sandwich MEV in ERC-20 DeFi via Context-Aware Directional Constraints	354
<i>Prerna Arote</i>	
Blockchain-Driven Intrusion Prevention and Runtime Assurance for Cyber-Physical Systems	357
<i>Hamza Ibrahim, Love Allen Chijioke Ahakonye, Jae Min Lee, Dong-Seong Kim</i>	
Privacy-Preserving NFT Access Control with Threshold Cryptography and Offline Wallet Integration	366
<i>Oroceo Paul Angelo, Josiah Ayoola Isong, Paul Michael Custodio, Lee Jae Hyun, Jae-Min Lee</i> <i>Dong-Seong Kim</i>	
T-MGA: Temporal GNNs with Global Attention for Smart Contract Vulnerability Detection	375
<i>Syed Imran Hussain Shah, Yared Abera Ergu, Po-Ching Lin, Van-Linh Nguyen</i>	
GasLiteAA: Optimizing ERC-4337 for Efficient and Secure Gas Sponsorship	384
<i>Hongxu Su, Mingzhe Liu, Jie Xu, Xiaohua Jia, Xuechao Wang</i>	
Demo: Continuous Measurement of Bitcoin-Derived P2P Networks with DaeConn	393
<i>Dogukan Baysal, Yu Gao, Matija Piškorec, Claudio J. Tessone</i>	
Private Blockchain-Enabled Computer Vision for Product Authentication and Tracking	395
<i>Yash Madhwal, Ilia Nosov, Anton Barabulya, Aleksey Sivolotskii, Yury Yanovich</i>	
Modifying Existing Multiplayer Games Using Blockchain: Crypto-Craft	397
<i>Callum Smith</i>	
Caliper-in-the-Loop: Black-Box Optimization for Hyperledger Fabric Performance Tuning	400
<i>Yash Madhwal, Arseny Bolotnikov, Mark Prikhno, Irina Lebedeva, Ivan Laishevskiy, Vladimir Gorgadze</i> <i>Artem Barger, Yury Yanovich</i>	
Empowering Smart Contracts with Real-time On-Chain AI Inferences	403
<i>Rabimba Karanjai, Yang Lu, Lei Xu, Weidong Shi</i>	
BioPassport: A Policy-Enforced Blockchain-Credential Architecture for Tamper-Evident Biomaterial Provenance	406
<i>Victor Ikenna Kanu, Josiah Ayoola Isong, Simeon Okechukwu Ajakwe Smieeee, Dong-Seong Kim Smieeee</i>	

Performance Evaluation of Hyperledger Fabric on Heterogeneous Architectures	409
<i>Chen-Wei Ni, Chih-Yu Wen</i>	
Who Restores the Peg? A Mean-Field Game Approach to Model Stablecoin Market Dynamics	411
<i>Hardhik Mohanty, Bhaskar Krishnamachari</i>	
MoFE: A Novel Mixture-of-Experts Framework with Fourier Neural Operators for Cryptocurrency Forecasting	420
<i>Bowen Liu, Mingming Sun</i>	
Mitigating Wash Trading in Incentive-Oriented Semiconductor Blockchain Frameworks	429
<i>Aritri Saha, Ujjwal Guin, Vivek Menon</i>	
From Impermanent Loss to Sustainable Gain: Quantifying Profitability Zones for Liquidity Providers on DEX	438
<i>Ignat Melnikov, Roman Vlasov, Vladimir Gorgadze, Andrey Seoev, Yury Yanovich</i>	
LOCARD: An Agentic Framework for Blockchain Forensics	447
<i>Xiaohang Yu, William Knottenbelt</i>	
From Risk to Rescue: An Agentic Survival Analysis Framework for Liquidation Prevention	456
<i>Fernando Spadea, Oshani Seneviratne</i>	
LLM-Guided Subgraph Synthesis for Bitcoin Money Laundering Detection	465
<i>Jeongheon Kim, James Won-Ki Hong</i>	
Data Inclusion Proofs for Account-based Blockchains Storage Nodes	474
<i>Nhi Luu, Vir Pathak, James Liu, Zhengnan Hua, Joseph Hilsberg, Sushmita Ruj</i>	
Systemic Risk in DeFi: A Network-Based Fragility Analysis of TVL Dynamics	477
<i>Shiyu Zhang, Zining Wang, Jin Zheng, John Cartlidge</i>	
Topological Sharding: A New Paradigm in Blockchains for Enforcement of Spectrum Policies	480
<i>Elnaz Mehraein, Aveek Dutta</i>	
Keisho: A Dual-Threshold Bitcoin Inheritance with Legal Compliance	483
<i>Dhruv C. Vaghasiya, Takashi Kaneko, Shin'Ichiro Matsuo</i>	
Diagnosing High-Performance BFT Consensus via Mixture Modeling of Block Time Distributions	486
<i>Hongru He, Akihiro Fujihara</i>	
Single Secret Leader Election in Ethereum PoS: An Empirical Study of Whisk and Homomorphic Sortition under DoS on the Leader and Censorship	495
<i>Tereza Burianová, Martin Perešíni, Ivan Homoliak</i>	
SSLE-DAG: A High-Throughput Proof-of-Stake Consensus Protocol Combining an Adaptive DAG with a Single Secret Leader Election	504
<i>Tomáš Hladký, Martin Perešíni, Juraj Mariani, Ivan Homoliak</i>	
Nominated Proof of Stake: A Reality Check	513
<i>Maurantonio Caprolu, Elia Onofri, Omar Eldesouky, Roberto Di Pietro</i>	
Trustless Stablecoin Transfers between Arbitrum and Sui via Solver-Auction HTLC	523
<i>Asaddulla Rakhmani, Yash Madhwal, Yury Yanovich</i>	

Demo: Interactive Visualization of Cardano Staking	525
<i>Yukta Koralla, Matija Piškorec, Claudio J. Tessone</i>	
TxLens: Scalable Real-Time Detection of Malicious Ethereum Transactions	527
<i>Tamer Abdelaziz, Karim Ali</i>	
Hopinzero: zkSNARK-Verified Privacy for On-Chain Options with Pooled Liquidity	537
<i>Kristián Košťál, Roman Bitarovský, Lukáš Mastilák</i>	
PumpSense: Real-Time Detection and Target Extraction of Crypto Pump-and-Dumps on Telegram	546
<i>Ahmed Mahrous, Roberto Di Pietro</i>	
Decoding RWA Tokenized U.S. Treasuries: Functional Dissection and Address Role Inference	555
<i>Junliang Luo, Katrin Tinn, Samuel Ferreira Duran, Di Wu, Xue Liu</i>	
Quantifying the Impact of Network Volatility on Proof-of-Stake Consensus	564
<i>Christopher G. Harris</i>	
A Node Triple-Based Structural Analysis of Duplicate Message Reception in P2P Broadcast Networks	567
<i>Sungwook Lee, Jinhyeok Lee, Seungmin Kim, Hyungyeop Kim, Hongtaek Ju</i>	
Decoding On-Chain Identities: A Dynamic Graph Learning Framework for Robust Sybil Detection	570
<i>Yingzhe Yu, Zhenhang Shang, Kani Chen</i>	
Feature-Centric Methodology for Analyzing Cross-Chain NFT Migration Compatibility	573
<i>Mohd Sameen Chishti, Damilare Peter Oyinloye, Jingyue Li</i>	
Cost and Latency Benchmarking of Intent- and Non-Intent-Based Cross-Chain Bridges	582
<i>Gian Seyitcan Senpinar, Benjamin Kraner, Claudio J. Tessone</i>	
Efficient Data Availability Sampling via Coded Distributed Arrays	591
<i>Dang Pham Minh, Hung Vuong Huu, Duc A. Tran</i>	
Mind the Gap: Liquidity Poisoning Attacks on Multihop Cross-Chain Arbitrage	599
<i>Prerna Arote</i>	
Cross-Chain Interoperability: Local, Proved, and Checkpointed States	604
<i>Jonathan Oleszkiewicz, Babu Pillai</i>	
Detecting Tradable Put-Call Parity Breaks in Crypto Options: A High-Frequency Bid-Ask Study on Delta Exchange	608
<i>Ahmad Abtahi, Reza Abtahi, Burkhard Stiller</i>	
Trust Dynamics in Cryptocurrency Markets: Centralized vs. Decentralized Exchanges	613
<i>Xintong Wu, Wanlin Deng, Yutong Quan, Lin William Cong, Luyao Zhang</i>	
The Impossibility of Preventing MEV via Transaction Order Enforcement	618
<i>H.M.N. Dilum Bandara, Qin Wang, Mark Staples, Shiping Chen</i>	
Factors Influencing the Performance of Hybrid Models for Anomaly Detection in Blockchain Transactions	621
<i>Narayan Ranjan Chakraborty, Mohammed Javed Morshed Chowdhury, Mehdi Rajaeian, Safiqul Islam Kamanashis Biswas</i>	

Blockchain-Based Secure Product Authenticity Verification for Industrial Networks	629
<i>Varun Dobhal, Saksham Mittal, Mohammad Wazid, Sourav Saha, Ashok Kumar Das, Shantanu Pal</i>	
<i>Joel J. P. C. Rodrigues</i>	
DualCare: A Blockchain Framework for Secure Medical Data Sharing with Dual Consent	635
<i>Kumari Hemlata, Sanjana Saxena, Divyansh Barodiya, Raman, Sujata Pal, Shantanu Pal</i>	
Tail Latency as the Bottleneck in Cross-Chain Interoperability: A Validator-Centric Study	641
<i>Christopher G. Harris</i>	
Empirical On-Chain Analysis of Delays in Packet Forward Middleware-Based Multi-Hop CrossChain Transfers	648
<i>Takaaki Yanagihara, Akihiro Fujihara</i>	
Characterizing Path-Independent Fees: A Route to Zero Impermanent Loss in CPMs	655
<i>Andrey Voronin, Roman Vlasov, Vladimir Gorgadze, Andrey Seoev, Yury Yanovich</i>	
Executing Arbitrage at Scale: Empirical Evidence on Crypto Spot Market Efficiency	662
<i>Robert Henker, Daniel Atzberger, Jan Ole Vollmer, Willy Scheibel, Jurgen Döllner</i>	
Toward a Taxonomy of Cryptocurrency Arbitrage Strategies	669
<i>Reza Abtahi, Ahmad Abtahi, Burkhard Stiller</i>	
Hexa-Trust System for Reliable Agent-to-Agent Payment	676
<i>Donghyun Ahn, Changhoon Kang, James Won-Ki Hong</i>	
A Comprehensive Evaluation of GNN Models for Fraud Detection in Blockchain Transactions	683
<i>Narayan Ranjan Chakraborty, Mohammed Javed Morshed Chowdhury, Mehdi Rajaeian, Md Zia Uddin</i>	
<i>Kamanashis Biswas</i>	
FeeDeR: Fee-Based Bi-Directional Rebalancing in Payment Channel Networks	690
<i>Shruti Mishra, Shubham Kapoor, Sujata Pal</i>	
Traffic-Based Characterization of Ethereum Beacon Nodes	696
<i>Hyungyeop Kim, Sungwook Lee, Seungmin Kim, Jinhyeok Lee, Hongtaek Ju</i>	
ShardGuard: A Reinforcement Learning-Based Defense Scheme for Secure Sharding in Blockchains	702
<i>Anushka Nehra, Arzoo Miglani, Isaac Woungang, Rajkumar Buyya</i>	
A Dual-Layer Architecture for Asset-Centric RWA Tokenization on Blockchain	709
<i>Umut Pekel, Oğuz Yayla</i>	
A Reproducible Baseline for Post-Incident Cross-Chain Flow Prioritisation	716
<i>David L. John, Vallipuram Muthukumarasamy</i>	
TOPOS: Topological Profiling of On chain Subgraphs for Cross Chain Forensics	721
<i>Aravinda S. Rao, Babu Pillai</i>	
Meta Transaction Fee Mechanisms for Equitable Arbitrage	725
<i>Aditya Ahuja, Rajan Ma, Sachin Lodha</i>	
Towards Optimised Detection of Smart Contract Vulnerabilities using Large Language Models	730
<i>Awarjana Perera, Aravinda S. Rao, Jeyakumar Samantha Tharani, Vallipuram Muthukumarasamy</i>	
Public-Chain CBDCs as Sovereign Counterparts to Stablecoins: A Functional Equivalence Perspective	733
<i>Babu Pillai, Aravinda S. Rao</i>	

FluxLayer: A Secure Three-Layer Architecture for Unified Cross-Chain Liquidity	735
<i>Xin Lao, Shiping Chen, Qin Wang</i>	
SoK: Cross-Domain and Application-Layer Security in Ethereum Rollup Ecosystems	744
<i>Ivan Efimov, Yash Madhwal, Yury Yanovich</i>	
Consecutive Proposer Runs and Block-Time Irregularities in CometBFT-Based Chains	758
<i>Takaaki Yanagihara, Akihiro Fujihara</i>	
SolShift: Design of Automated Solidity Code Translation Method to Prevent Reentrancy Attacks	765
<i>Tsuyoshi Kanemaru, Naoto Yanai, Hideharu Kojima</i>	
Zero-Knowledge-Enabled Verification of NFT-Issued Skill Certificates	772
<i>Dmytro Kovalenko, Dušan Morháč, Kristián Košťál</i>	
Modeling Phantom Proof Attacks via Weaponized Censorship Resistance in Polygon zkEVM	779
<i>Thisal De Silva, H. M. N. Dilum Bandara, Annabelle Mciver</i>	
Enhanced EIP-7503 Zero-Knowledge Wormholes	786
<i>Donato Pellegrino, Jan Lauinger, Phillip Kemper, Jan Gorzny, Martin Derka</i>	
Tile-Based Zero-Knowledge Verification of Grayscale Image Transformations	793
<i>Aristidas Lukas Končius, Laura Atmanavičiūtė, Saulius Masteika</i>	