Local Time	Day 1 (14 July)		
08:00-08:30	Registration (Building 20 Foyer)		
08:30-09:00	Welcome Coffee (Building 20 Foyer)		
09:00-09:30	Opening & Photo		
09:30-10:30	Jennifer Seberry Lecture (Theatre 3) Title: The Evolution of Cybersecurity Research at CSIRO: A Two- Decade Journey and Future Outlook Speaker: Surya Nepal Session Chair: Josef Pieprzyk		
10:30-11:00	Coffee Break (Building 20 Foyer)		
11:00-12:20	Session 1A (Theatre 3) (Session Chair: Ron Steinfeld)	Session 1B (Theatre 2) (Session Chair: Siqi Ma)	
12:30-14:00	Lunch (Building 20 Foyer)		
14:00-16:00	Session 2A (Theatre 3) (Session Chair: Guomin Yang)	Session 2B (Theatre 2) (Session Chair: Xiapu Luo)	
16:00-16:30	Coffee Break (Building 20 Foyer)		
16:30-17:10	Session 3 (Theatre 3) (Session Chair: Yudi Zhang)		
17:20-17:50	Special Event: In Memory of Ed Dawson (Theatre 3) (Session Chair: Colin Boyd)		
18:00-19:30	Dinner: Pizza Night Location: Building 20 Foyer		

Session 1A: Cryptographic Foundations and Number Theory

- 1. Compact Lifting for NTT-unfriendly Modulus (Ying Liu, Xianhui Lu, Yu Zhang, Ruida Wang, Ziyao Liu, Kunpeng Wang)
- 2. Guaranteed Termination Asynchronous Complete Secret Sharing with Lower Communication and Optimal Resilience (Ying Cai, Chengyi Qin, Mingqiang Wang)
- 3. Solving Generalized Approximate Divisor Multiples Problems (Naoki Shimoe, Noboru Kunihiro)
- 4. Improving RSA Cryptanalysis: Combining Continued Fractions and Coppersmith's Techniques (Mengce Zheng, Yansong Feng, Abderrahmane Nitaj, Yanbin Pan)

Session 1B: Al Security and Privacy (1)

- 1. Identifying the Truth of Global Model: A Generic Solution to Defend Against Byzantine and Backdoor Attacks in Federated Learning (Sheldon C. Ebron, Meiying Zhang, Kan Yang)
- 2. RAGLeak: Membership Inference Attacks on RAG-based Large Language Models (Kaiyue Feng, Guangsheng Zhang, Huan Tian, Heng Xu, Yanjun Zhang, Tianqing Zhu, Ming Ding, Bo Liu)
- 3. DeGain: Detecting GAN-based Data Inversion in Collaborative Deep Learning (Zhenzhu Chen, Yansong Gao, Anmin Fu, Fanjian Zeng, Boyu Kuang, Robert H. Deng)
- 4. FRFL: Fair and Robust Federated Learning Incentive Model Based on Game Theory (Haocheng Ye, Lu Zhou, Hao Wang, Chunpeng Ge)

Session 2A: Digital Signatures and Zero Knowledge

- 1. Compressed Sigma Protocols: New Model and Aggregation Techniques (Yuxi Xue, Tianyu Zheng, Shang Gao, Bin Xiao, Man Ho Au)
- 2. Glitter: A Fully Adaptive and Tightly Secure Threshold Signature (Shaolong Tang, Peng Jiang, Liehuang Zhu)
- 3. Faster VOLEitH Signatures from All-but-One Vector Commitment and Half-Tree (Dung Bui, Kelong Cong, Cyprien Delpech de Saint Guilhem)
- 4. Efficient Multi-instance Vector Commitment and Application to Post-quantum Signatures (Dung Bui)
- 5. Three-Round (Robust) Threshold ECDSA from Threshold CL Encryption (Bowen Jiang, Guofeng Tang, Haiyang Xue)
- 6. Lattice Attack with EHNP: Key Recovery from Two ECDSA Signatures and Breaking the Information-Theoretic Limit (Tianyou Tang, Shuqin Fan)

Session 2B: ystem and Software Security

- 1. Bridging Clone Detection and Industrial Compliance: A Practical Pipeline for Enterprise Codebases (Xiaowei Zhang, Shigang Liu, Jun Zhang, Yang Xiang)
- 2. Mitigating the Unprivileged User Namespaces based Privilege Escalation Attacks with Linux Capabilities (Jingzi Meng, Yuewu Wang, Lingguang Lei, Chunjing Kou, Peng Wang, Huawei Lu)
- 3. Ransomware Encryption Detection: Adaptive File System Analysis Against Evasive Encryption Tactics (Arash Mahboubi, Hamed Aboutorab, Seyit Camtepe, Hang Thanh Bui, Khanh Luong, Keyvan Ansari, Shenlu Wang, Bazara Barry)
- 4. SoK: From Systematization to Best Practices in Fuzz Driver Generation (Qian Yan, Minhuan Huang, Huayang Cao, Shuaibing Lu)
- 5. Facial Authentication Security Evaluation against Deepfake Attacks in Mobile Apps (Chuer Yu, Haoyu Wang, Xia Liu, Zonghui Wang, Lirong Fu, Zhiyuan Wan, Yandong Gao, Yang Xiang, Wenzhi Chen)
- 6. Shortest Printable Shellcode Encoding Algorithm Based on Dynamic Bitwidth Selection (Guoan Liu, Jian Lin, Weiyu Dong, Jiaan Liu, Tieming Liu)

Session 3: Cryptology & AI

- 1. Zeroth-Order Federated Private Tuning for Pretrained Large Language Models (Xiaoyu Zhang, Yong Lin, Meixia Miao, Jian Lou, Jin Li, Xiaofeng Chen)
- 2. Unbounded Multi-Hop Proxy Re-Encryption with HRA Security: An LWE-Based Optimization (Xiaohan Wan, Yang Wang, Haiyang Xue, Mingqiang Wang)

Local Time	Day 2 (15 July)	
08:45-09:00	Registration (Building 20 Foyer)	
09:00-10:00	Keynote Session (Theatre 3) Title: KEMs and Their Applications to Quantum-Safe Communications	
	Speaker: Rei Safavi-Naini	Session Chair: Willy Susilo
10:00-10:30	Coffee Break (Building 20 Foyer)	
10:30-11:50	Session 4A (Theatre 3) (Session Chair: Keisuke Tanaka)	Session 4B (Theatre 2) (Session Chair: Robert Deng)
12:00-12:30	Special Event: 30 th ACISP Memory (Session Chair: Willy Susilo & Josef Pieprzyk)	
12:30-14:00	Lunch (Building 20 Foyer)	
14:00-16:00	Session 5A (Theatre 3) (Session Chair: Joseph Liu)	Session 5B (Theatre 2) (Session Chair: Xingliang Yuan)
16:00-16:20	Coffee Break (Building 20 Foyer)	
16:20-17:20	ACISP Steering Committee Meeting (Theatre 3)	
17:20-18:00	Travel to Banquet (Free Bus 55A)	
18:00-22:00	Banquet Location: Harbourfront Seafood Restaurant Address: Ground Floor, 2 Endeavour Dr, Wollongong Note: Use your name badge to check in	

Session 4A: Post-Quantum Cryptography (1)

- 1. Partial Key Exposure Attacks on UOV and Its Variants (Yuki Seto, Hiroki Furue, Atsushi Takayasu)
- 2. Fiat-Shamir with Rejection and Rotation (Xianhui Lu, Yongjian Yin, Dingding Jia, Jingnan He, Yamin Liu, Yijian Liu, Hongbo Liu)
- 3. Amoeba: More Flexible RLWE-based KEM (Qingfeng Wang, Li-Ping Wang)
- 4. Get Rid of Templates: A Chosen-Ciphertext Attack on ML-KEM with a DPA-based Self-Comparison Oracle (Zhenzhi Lai, Udaya Parampalli)

Session 4B: Privacy Enhancing Technologies (1)

- 1. Comparing and Improving Frequency Estimation Perturbation Mechanisms under Local Differential Privacy (She Sun, Jiafei Wu, Jian Yang, Li Zhou, Huiwen Wu)
- 2. Strong Federated Authentication with Password-based Credential against Identity Server Corruption (Changsong Jiang, Chunxiang Xu, Guomin Yang, Li Duan, Jing Wang)
- 3. Anonymous Credentials with Credential Redaction and Its Application to SSI-based Plug&Charge for Shared Vehicles (Kyosuke Hatsugai, Kyoichi Asano, Yuki Sawai, Yohei Watanabe, Mitsugu Iwamoto)
- 4. EAPIR: Efficient and Authenticated Private Information Retrieval With Fast Server Processing (Hua Shen, Xinjie Li, Zhen Fan, Ge Wu, Mingwu Zhang)

Session 5A: Privacy Enhancing Technologies (2)

- 1. Direction-Oriented Smooth Sensitivity and Its Application to Genomic Statistical Analysis (Akito Yamamoto, Tetsuo Shibuya)
- 2. Sentence Embedding Generation Method for Differential Privacy Protection (Yangyang Liu, Wanqi Wang, Jingyu Hua)
- 3. KD-IBMRKE-PPFL: A Privacy-Preserving Federated Learning Framework Integrating Knowledge Distillation and Identity-Based Multi-Receiver Key Encapsulation (Yuan Li, Changji Wang, Shiwen Hu)
- 4. Robust and Privacy-Preserving Dynamic Average Consensus with Individual Weight (Yuanyuan Zhang, Yu Liu, Yahui Wang, Tianqing Zhu, Mingwu Zhang)

Session 5B: Encryption and Homomorphic

- 1. Ideal Transformations for Public Key Encryption (Yao Cheng, Xianhui Lu, Ziyi Li)
- 2. Receiver-initiated Updatable Public Key Encryption: Construction, Security and Application (Jiahao Xuan)
- 3. Indifferentiability Separations in Ideal Public Key Encryption: Explicit vs. Implicit Rejection (Yao Cheng, Xianhui Lu, Ziyi Li, Yongjian Yin)
- 4. Accountability for Server Misbehavior in Homomorphic Secret Sharing (Xinzhou Wang, Shi-Feng Sun, Dawu Gu, Yuan Luo)
- 5. High-Precision Homomorphic Modular Reduction for CKKS Bootstrapping (Zejiu Tan, Junping Wan, Zoe L. Jiang, Jingjing Fan, Man Ho Au, Siuming Yiu)
- 6. Refined Error Management for Gate Bootstrapping (Chunling Chen, Xianhui Lu, Binwu Xiang, Bowen Huang, Ruida Wang, Yijian Liu)



Local Time	Day 3 (16 July)	
08:45-09:00	Registration (Building 20 Foyer)	
09:00-10:00	Keynote Session (Theatre 3) Title: A Multi-Enclave Architecture for Blockchains Admitting Proof of Useful Work for Consensus Speaker: Yuliang Zheng Session Chair: Joonsang Baek	
10:00-10:30	Coffee Break (Building 20 Foyer)	
10:30-12:30	Session 6A (Theatre 3) (Session Chair: Yohei Watanabe)	Session 6B (Theatre 2) (Session Chair: Leonie Simpson)
12:30-14:00	Lunch (Building 20 Foyer)	
14:00-15:40	Session 7A (Theatre 3) (Session Chair: Man Ho Allen Au)	Session 7B (Theatre 2) (Session Chair: Mingwu Zhang)
15:40-16:00	Closing (Theatre 3)	

Session 6A: Cryptographic Protocols and Blockchain

- 1. FlexiADKG: A Flexible Asynchronous Distributed Key Generation Protocol with Constant Round Complexity (Yang Yang, Bingyu Li, Zhenyang Ding, Qianhong Wu, Bo Qin, Qin Wang)
- 2. TEAKEX: TESLA-Authenticated Group Key Exchange (Qinyi Li, Lise Millerjord, Colin Boyd)
- 3. SoK: A Deep Dive into Anti-Money Laundering Techniques for Blockchain Cryptocurrencies (Qishuang Fu, Joseph K. Liu, Shirui Pan, Tsz Hon Yuen)
- 4. Advanced Temporal Graph Embedding For Detecting Fraudulent Transactions on Complex Blockchain Transactional Networks (Jianbin Gao, Ansu Badjie, Qi Xia, Patrick Mukala, Hu Xia, Grace Mupoyi Ntuala)
- 5. Walnut: A Generic Framework with Enhanced Scalability for BFT Protocols (Lei Tian, Chenke Wang, Yu Long, Xian Xu, Mingchao Wan, Chunmiao Li, Shi-Feng Sun, Dawu Gu)
- 6. PPSCCC: Privacy-Preserving Scalable Cross-Chain Communication Among Multiple Blockchains Based on Parent-Child Blockchain (Hideaki Miyaji, Noriaki Kamiyama)

Session 6B: Symmetric-Key Cryptography and Cryptanalysis

- 1. Forgery Attacks on SipHash (Kosuke Sasaki, Rikuto Kurahara, Kosei Sakamoto, Takanori Isobe)
- 2. Cryptanalysis of Fruit-F: Exploiting Key-Derivation Weaknesses and Initialization Vulnerabilities (Subhadeep Banik, Hailun Yan)
- 3. Exploring Key-Recovery-Friendly Differential Distinguishers for SM4 and Their Performance in Differential Attacks (Bingqing Li, Ling Sun)
- 4. Inner Product Masked Integral Distinguishers and Integral Sets over Large Finite Fields Applications to MiMC, CIMINION and Chaghri (Weizhe Wang, Deng Tang, Haoyang Wang)
- 5. Improved Differential Meet-In-The-Middle Cryptanalysis on SIMON and Piccolo (Weiqing Deng, Jianing Zhang, Haoyang Wang)
- 6. Strengthening Key Scheduling of AES-256 with Minimal Software Modifications (Shoma Kawakami, Kazuma Taka, Atsushi Tanaka, Tatsuya Ishikawa, Takanori Isobe)

Session 7A: AI Security and Privacy (2)

- 1. MG-Det: Deepfake Detection with Multi-Granularity (Ahmed Asiri, Luoyu Chen, Zhiyi Tian, Xiaoyu Ding, Shui Yu)
- 2. LPIA: Label Preference Inference Attack against Federated Graph Learning (Jiaxue Bai, Lu Shi, Yang Liu, Weizhe Zhang)
- 3. DPFedSub: A Differentially Private Federated Learning with Randomized Subspace Descend (Huiwen Wu, Chuan Ma, Xueran Li, Deyi Zhang, Xiaohan Li, She Sun)
- 4. DARA: Enhancing Vulnerability Alignment via Adaptive Reconstruction and Dual-Level Attention (Lihua Wang, Jiaojiao Jiang, Salil S. Kanhere, Jiamou Sun, Sanjay Jha, Zhenchang Xing)
- 5. Understanding the Robustness of Machine Unlearning Models (Guanqin Zhang, Feng Xu, H.M.N. Dilum Bandara, Shiping Chen, Yulei Sui)

Session 7B: Post-Quantum Cryptography (2)

- Towards Quantum Security of Hirose Compression Function and Romulus-H (Shaoxuan Zhang, Chun Guo, Meiqin Wang)
- 2. Breaking the Shield: Novel Fault Attacks on CRYSTALS-Dilithium (Dixiao Du, Yuejun Liu, Yiwen Gao, Jingdian Ming, Hao Yuan, Yongbin Zhou)
- 3. Efficient Revocable Identity-Based Encryption from Middle-Product LWE (Takumi Nishimura, Atsushi Takayasu)
- 4. Code-based Fully Dynamic Accountable Ring Signatures and Group Signatures using the Helper Methodology (Rishiraj Bhattacharyya, Sreehari Kollath, Christophe Petit)