

Real World Crypto 2026 - Taipei Agenda

完整詳細議程表 (Full Detailed Schedule) | March 9 - 11, 2026

3/9 (Mon) 星期一

08:00 - 09:00

Registration | 報到

09:00 - 09:15

Welcome | 開幕致詞

RWC 2026 General Chair / 大會總主席

09:15 - 10:35

Session: Beyond Secure Messaging

安全通訊的下一篇文章

Chair / 主持人 : Cas Cremers

A Practical Wrapper Protocol for Metadata-Hiding in Messaging

通訊中繼資料隱匿之實用封裝協定

Authors: Lea Thiemt, Paul Rösler, Alexander Bienstock, Rolfe Schmidt, Yevgeniy Dodis
FAU Erlangen-Nürnberg, J.P. Morgan AI Research, Signal Messenger, NYU

Advanced Browsing Protection for Facebook Messenger

Facebook Messenger 之進階瀏覽防護

Authors: Emma Connor, Artem Ignat'yev, Kevin Lewi

Meta

Improving the Trustworthiness of JavaScript on the Web

提升網頁 JavaScript 之可信度

Authors: Ezzudin Alkotob, Giulio Berra, Benjamin Beurdouche, Richard Hansen, Daniel Huigens, Dennis Jackson, Cory Francis Myers, Michael Rosenberg

Meta, Freedom of Press Foundation, Mozilla, Proton AG, Cloudflare

Signal Lost (Integrity): The Signal App is More than the Sum of its Protocols

訊號遺失(完整性): Signal App 之整體大於協定總和

Authors: Kien Tuong Truong, Noemi Terzo, Peter Schwabe, Kenneth Paterson
ETH Zurich, Max-Planck Institute for Security and Privacy

10:35 - 11:05

Coffee Break | 茶敘

11:05 - 11:35

Levchin Prize

Chair: Dan Boneh

11:35 - 12:05

Invited Talk I | 特邀演講 I

12:05 - 13:35

Lunch | 午餐

3/10 (Tue) 星期二

09:00 - 10:20

Session: Real World Privacy

真實世界中的隱私

Chair: Henry Corrigan-Gibbs

Deploying Research: On Building and Shipping an Anonymous Whistleblowing System

研究部署：建構並發布匿名揭弊系統

Authors: Daniel Hugenroth, Luke Hoyland, Sam Cutler, Alastair Beresford

University of Cambridge, The Guardian

SecureDrop Next Generation: Lessons from a Decade of Deployment

SecureDrop 次世代：十年部署經驗之回顧與反思

Authors: Giulio Berra, Felix Linker, Luca Maier, Cory Francis Myers, Kenneth G. Paterson, Rowen Shane, Shannon Veitch

Freedom of the Press Foundation, ETH Zurich

Real-World Steganography Against Content-Based Censorship

對抗現代通訊軟體內容審查之實務隱寫術

Authors: Boya Wang, Markus Schiffermüller, Klim Kireev, Carmela Troncoso
MPI-SP, EPFL, TU Graz

At-Compromise Security: The Case for Alert Blindness

帳號遭入侵後的安全性：警報盲點之探討

Authors: Martin R. Albrecht, Simone Colombo, Benjamin Dowling, Rikke Bjerg Jensen
King's College London, Royal Holloway

10:20 - 10:50

Coffee Break | 茶敘

10:50 - 11:20

Invited Talk | 特邀演講

Defending the Open Internet: TLS, Passkeys, and the Privacy Stakes of Digital Identity

捍衛開放網際網路：TLS、通行密鑰與數位身分的隱私利害關係

Speaker: Christopher Harrell

Yubico

11:20 - 12:00

Session: Login Security

登入安全

Chair: TBD

TBA

Authors: Matilda Backendal, Kenneth Paterson, Matteo Scarlata, Giovanni Torrisi

ETH Zurich

Improving Account Security for Victims of Account Compromise through Client-Side Access Logging

強化帳號受駭者之安全性

Authors: Carolina Ortega Pérez, Paul Gerhart, Alaa Daffalla, Thomas Ristenpart
Cornell University, TU Wien, Cornell Tech

12:00 - 13:30

Lunch | 午餐

3/11 (Wed) 星期三

09:00 - 10:20

Session: Privacy-Enhancing Technologies

隱私強化技術

Chair: Thomas Ristenpart

Counter Galois Onion (CGO): Fast Non-Malleable Onion Encryption for Tor

CGO : Tor 之高速不可延展洋葱加密

Authors: Jean Paul Degabriele, Alessandro Melloni, Jean-Pierre Münch, Martijn Stam
Technology Innovation Institute, Simula UiB, TU Darmstadt

Let's Aggregate? Towards making private telemetry as ubiquitous as TLS

Let's Aggregate? 讓隱私遙測如 TLS 般普及

Authors: Ryan Lehmkul, Henry Corrigan-Gibbs, Emma Dauterman, David J. Wu
MIT, Stanford, UT Austin

How Private Can Private Advertising Really Be?

「隱私廣告」究竟能有多隱私？

Authors: Kyle Hogan, Alishah Chator, Gabriel Kapchuk, Mayank Varia, Srinivas Devadas
MIT, Baruch College, UMD, Boston University

Sprinkle Differential Privacy on a Bit of Everything

將差分隱私融入多元應用

Authors: Daniel Pöllmann, Tianxin Tang

ETH Zurich, Eindhoven University of Technology

10:20 - 10:50

Coffee Break | 茶敘

10:50 - 11:30

Session: Bluetooth-based Protocols

藍牙協定安全

Chair: TBD

Security of Bluetooth: A Cryptographic View on Analyzing a Leviathan

藍牙安全性：以密碼學視角剖析龐然巨獸

Authors: Marc Fischlin, Olga Sanina

Technische Universität Darmstadt

The Landscape of Offline Finding Protocols: Privacy, Safety, Problems

離線尋找協定之全景：隱私、安全與挑戰

Authors: Akshaya Kumar, Carolina Ortega Perez, Anna Raymaker, Joseph Jaeger, Michael Specter, Thomas Ristenpart

Georgia Institute of Technology, Cornell University, Cornell Tech

11:30 - 12:00

Lightning Talks | 閃電秀

Chair: Nigel Smart

12:00 - 13:20

Lunch | 午餐

13:20 - 13:50

Invited Talk | 特邀演講

A bird's-eye view of cryptographic practice

密碼學實務之鳥瞰

Speaker: Nadia Heninger

University of California, San Diego

Session: Verification and Testing**驗證與測試**

Chair: Chitchanok Chuengsatiansup

Finding Bugs and Features Using Cryptographically-Informed Functional Testing

運用具密碼學資訊之功能性測試尋找漏洞與特徵

Authors: Giacomo Fenzl, Jan Gilcher, Fernando Virdia

EPFL, ETH Zurich, University of Surrey

Formosa Crypto: End-to-End Formally Verified Crypto Software

Formosa Crypto：端對端形式化驗證之密碼軟體

Authors: José Bacelar Almeida, Gustavo Xavier, Delerue Marinho Alves, Santiago Arranz-Olmos, Manuel Barbosa, Francisca Barros, Gilles Barthe, Lionel Blatter, Chitchanok Chuengsatiansup, Ignacio Cuevas, François Dupressoir, Luis Esquivel, Andreas Hülsing, Benjamin Grégoire, Ruben Gonzalez, Jan Jancar, Vincent Hwang, Vincent Laporte, Jean-Christophe Léchenet, Ting-han Lim, Cameron Low, Tiago Oliveira, Hugo Pacheco, Swarn Priya, Miguel Quaresma, Rolfe Schmidt, Peter Schwabe, Antoine Séré, Basavesh Ammanaghata Shivakumar, Pierre-Yves Strub, Lucas Tabary-Maujean, Yuval Yarom, Zhiyuan Zhang, Jieyu Zheng
Universidade do Minho, PQShield, MPI-SP, INESC TEC, IMDEA, Signal, Neodyne AG, et al.

mlkem-native: a Unified, Fast and Verified ML-KEM Library

mlkem-native：整合式、高效能且可驗證之 ML-KEM 函式庫

Authors: Hanno Becker, Matthias J. Kannwischer, Dusan Kostic, John Harrison, Rod Chapman

Amazon Web Services, Chelpis

Formally Verifying Circuits for Zero Knowledge Proofs

零知識證明電路之形式化驗證

Authors: Alex Ozdemir, Shankara Pailoor

MPI-SP / Georgia Tech, Veridise

Compositional Formal Verification of SNARKs with ArkLib

基於 ArkLib 之 SNARKs 組合式形式化驗證

Authors: Quang Dao, Alexander Hicks, Devon Tuma, Julian Sutherland, Katerina Hristova, Frantisek Silvasi, Ilia Vlasov, Chung Thai Nguyen

CMU, Ethereum Foundation, Nethermind, Imperial College London

15:10 - 15:40

Coffee Break | 茶敘

15:40 - 16:10

TBA (待定)

16:10 - 18:15

Session: Hardware**硬體安全**

Chair: TBD

Migrating a Silicon Root of Trust to Post-Quantum Crypto

晶片信任根至後量子密碼之遷移

Authors: Amin Abdulrahman, Andrew 'bunnie' Huang, Evan Apinis, Matthias J. Kannwischer, Ruben Niederhagen, Felix Oberholz, Hoang Nguyen, Hien Pham, Jade Philipoom, Dominic Rizzo, Robert Schilling, Peter Schwabe, Tobias Stelzer, Augustine Tang, Andreas Zankl
MPI-SP, zeroRISC, Chelpis, Academia Sinica, Fraunhofer AISEC, Rivos Inc.

Cryptanalysis: Undervolting-based Static Side-channel Attacks

Cryptanalysis：基於降壓之靜態旁路攻擊

Authors: Kyle Mitard, Saleh Khalaj Monfared, Fatemeh Khojasteh, Dana Robert Dumitru, Yuval Yarom, Shahin Tajik
WPI, Ruhr University Bochum, University of Adelaide**TEE.fail: Breaking Trusted Execution Environments via Memory Bus Interposition**

TEE.fail：藉由記憶體匯流排攔截攻破可信執行環境

Authors: Jalen Chuang, Alex Seto, Nicolas Berrios, Stephan van Schaik, Christina Garman, Daniel Genkin
Georgia Tech, Purdue University, van Schaik LLC**Kerckhoff's Principle in Practice: Addressing Security by Obscurity in Secure Hardware**

Kerckhoff's 原則之實踐：解決安全硬體中之隱匿式安全

Authors: Vojtech Suchanek, Jan Jancar, Jan Kvapil, Petr Svenda, Łukasz Chmielewski
Masaryk University**Encryption in the Microarchitectural World**

微架構層級之加密技術

Authors: Ping-Lun Wang, Fraser Brown, Riccardo Paccagnella, Eyal Ronen, Riad S. Wahby, Yuval Yarom
CMU, Tel Aviv University, Ruhr University Bochum

18:45 - 20:45

Reception | 歡迎晚宴

13:30 - 14:50

Session: Post-Quantum Constructions**後量子建構**

Chair: Douglas Stebila

Keeping up with the KEMbiners

KEM 組合器之最新演進

Authors: Kathrin Hövelmanns, Deirdre Connolly, Andreas Hülsing, Stavros Kousidis, Matthias Meijers
Eindhoven University, Selkie Cryptography, BSI

Efficient Threshold ML-DSA

高效門檻式 ML-DSA

Authors: Guilhem Niot, Thomas Espitau, Thomas Prest, Rafael del Pino, Sofia Celi
PQShield, Univ Rennes, Brave, University of Bristol

XHMQV: Better Efficiency and Stronger Security for Signal's Initial Handshake based on HMQV

XHMQV：提升 Signal 初始握手之效率與安全性

Authors: Rune Fiedler, Felix Günther, Jiaxin Pan, Runzhi Zeng, Rolfe Schmidt
ETH Zurich, IBM Research, University of Kassel, Signal Messenger

A Call to Action: Transitioning Signal's Private Group System to Quantum-Safe

行動呼籲：將 Signal 私密群組系統遷移至量子安全架構

Authors: Graeme Connell, Sebastian Faller, Felix Günther, Julia Hesse, Vadim Lyubashevsky, Rolfe Schmidt
Signal Messenger, IBM Research, ETH Zurich

13:50 - 14:45

Session: PKI | 公鑰基礎設施

Chair: Paul Grubbs

(Dis)patches from the Web PKI: Fina, Static CT, MTC, and PLANTS

Web PKI 之修補與訊息：Fina、靜態 CT、MTC 與 PLANTS

Authors: Luke Valenta, David Benjamine, Matthew McPherrin, Filippo Valsorda
Cloudflare, Inc., Google, Let's Encrypt

Private Key Leaks in the Wild: Insights from Certificate Transparency

野外私鑰外洩：來自憑證透明性之洞見

Authors: Guillaume VALADON, Gaëtan FERRY, David TAO, Philippe BONEFF
GitGuardian, Google

Self-Auditable Key Transparency at Scale

大規模可自我稽核之金鑰透明性

Authors: Hossein Hafezi, Alireza Shirzad, Benedikt Bunz, Joseph Bonneau
New York University, University of Pennsylvania

14:45 - 15:15

Coffee Break | 茶敘

15:15 - 16:10

Session: Secure Channels in Practice**實務安全通道**

Chair: Marie-Sarah Lacharité

DTLS-SRTP: The Protocol Everyone is Using But Nobody is Checking

DTLS-SRTP：廣泛應用卻乏人檢視之協定

Authors: Martin Bach, Jean Paul Degabriele, Vukašin Karadžić, Lukas Knittel, Robert Merget
TU Darmstadt, Technology Innovation Institute, Ruhr-University Bochum

The widespread popularity of insecure proprietary network encryption in the Android ecosystem

Android 生態系中不安全私有網路加密之泛濫

Authors: Mona Wang, Jeffrey Knockel, Zoë Reichert, Prateek Mittal, Jonathan Mayer
UC Berkeley, The Citizen Lab, Princeton University

Lessons Learned from Cryptography Shortcuts on the Example of TLS Session Tickets

TLS Session Tickets 密碼學實作捷徑之教訓

Authors: Sven Hebrok, Tim Leonhard Storm, Felix Matthias Cramer, Maximilian Radoy, Simon Nachtigall, Marcel Maehren, Nurullah Erinola, Juraj Somorovsky, Robert Merget, Jörg Schwenk
Paderborn University, achelos GmbH, Ruhr University Bochum, Technology Innovation Institute

16:10 - 16:30

Closing Remarks | 閉幕致詞

RWC 2026 General Chair

17:45 - 19:45

17:45 - 19:45

Light Food and Beer | 輕食與啤酒之夜