

# Programme JC2 2023

Lundi	Mardi	Mercredi	Jeudi	Vendredi
8h45-9h				
<b>Accueil</b>				
9h – 10h Gilles Zémor - Recent constructions of asymptotically good quantum LDPC codes.	9h – 10h Alice Pellet-Mary - Lattices in cryptography: cryptanalysis, constructions and reductions	9h – 10h30 Guilhem Niot – Koganei, a hash-and-sign digital signature based on unstructured lattices	9h – 10h Christina Boura - Differential cryptanalysis : An old but still powerful technique	9h - 10h Damien Vergnaud - Calcul distribué « dans la tête » : techniques et applications
10h - 10h30 Virgile Guemard - Lift of quantum CSS codes and applications	10h – 10h40 Présentation du GT Parité et du projet de charte	Julien Devevey – G+G: A Fiat-Shamir Lattice Signature Based on Convolved Gaussians Corentin Jeudy – Signature avec Protocoles Efficaces sur les Réseaux Euclidiens, Application aux Accréditations Anonymes Calvin Abou Haidar - Efficient Updatable Public Key Encryption from Lattices Thi Thu Quyen Nguyen - Antrag: Annular NTRU Trapdoor Generation Making Mitaka As Secure As Falcon	10h – 10h30 Valerian Hatey – Représentations ternaires Sabira El Khalfaoui – A code-based digital signature scheme for post-quantum security	10h – 10h20 Matteo Abbonati – Probabilistic Analysis of LLL-based Decoder of Interleaved Chinese Remainder Codes Wouter Rozendaal – A Worst-Case Analysis of a Renormalisation Decoder for Kitaev's Toric Code
Pause café	Pause café thématique (10h40 – 11h10)	Pause café thématique	Pause café thématique	Pause café (10h20-10h50)
11h – 12h30 Mickaël Hamdad – Shooting for the Stars! The May-Ozerov Algorithm for Syndrome Decoding is "Galactic" Etienne Burle - Fonctions à trappe fondées sur la métrique rang avec erreurs homogènes Thibault Feneuil – Post-Quantum Signatures from Secure Multiparty Computation Maxime Bombar – Pseudorandom Correlation Generators from the Hardness of Decoding Quasi-Abelian Codes Victor Dyesryn – PERK: Compact Signature Scheme Based on a New Variant of the Permuted Kernel Problem	11h10 – 12h30 Guillaume Goy – A New Key Recovery Side-Channel Attack on HQC with Chosen Ciphertext Ninon Calleja Albillo – How not to use deep learning for side channel attacks Guilhém Assael – Attaque simple par canaux auxiliaires de la transformée en nombres entiers pour Cortex-M4 Benjamin Malthiery – Proposition d'une nouvelle approche de Strong PUF multidimensionnelle basée sur une couche mince multifonctionnelle	11h – 12h30 Julia Sauvage - Vers des outils de référence et de nouveaux algorithmes pour la résolution des systèmes polynomiaux quadratiques booléens Haetham Al Aswad - Discrete Logarithm Factory Ambrose Fleury – We Are on the Same Side. Alternative Sieving Strategies for the Number Field Sieve Fiorette Martinez – Attaques sur le Knapsack Generator elliptique et ses généralisations Agathe Houzelot – Implémentations Boîte-Blanche de l'ECDSA	11h – 12h30 Nicolas Sarkis - Better scalar multiplication on elliptic curves using theta models Andersson Calle Viera – Implémentation de signature à base de réseau sécurisée contre les attaques par canaux auxiliaires. Camille Mutschler - Estimateur de complexité de gadgets masqués Clementine Gritti – Benchmarking quantum-resistant authentication in IoT Abdel Taleb – Security of Concrete Implementations in the Random Probing Model: A Complete Methodology	10h50 – 11h30 Charles Olivier-Anclin – Practical Construction for Secure Trick-Taking Games Even With Cards Set Aside Hugo Beguinet – A different approach of Fiat-Shamir with aborts signatures using polytopes
Pause repas	Pause repas	Pause Repas	Pause repas	FIN – 11h30
14h30-15h30 Ahmed Alharbi - Revisiting the Long Message Attack & Auditing its Cost Dounia MFoukh – Cryptanalysis using Truncated Differential Aurélien Boeuf - Propagation of Subspaces in Primitives with Monomial Sboxes: Applications to Rescue and Variants of the AES Viet-Sang Nguyen – Linear Cryptanalysis and Countermeasures in Persistent Fault Model Samuel Bouaziz-Ermann – On the impossibility of Quantum Public Key Encryption	14h30-15h30 Marina Checri - Lightweight FHE-based Protocols Achieving Results Consistency for Data Encrypted Under Different Keys Nicolas Bon – Evaluation optimisée de circuits booléens en TFHE Daphné Trama – Building Blocks for LSTM Homomorphic Evaluation with TFHE Loris Bergerat - Faster Secret Keys for (T)FHE Mahshid Riahiha – Constrained Pseudorandom Functions from Homomorphic Secret Sharing		14h30-15h30 Léo Ackermann – Post-quantum encryption from lattice isomorphisms Guilhem Mureau – One the module-Lattice Isomorphism Problem Joël Felderhoff – Improved worst-case to average-case reduction for Ideal-SVP Pouria Fallahpour – Obviously Sampling Hard Instances of Lattice problems	
Mini-pause	Mini-pause		Mini-pause	
15h40-16h40 Augustin Bariant – Truncated Boomerang Attacks and Application to AES-based Ciphers Margot Funk – Algorithms and Models for the Differential Analysis of the AES Rachelle Heim-Boissier - Cryptanalysis of Elisabeth-4	15h40-16h40 Anaïs Bartholout – Dually Computable Cryptographic Accumulators Paola de Perthuis – Mises en gage coucou : chiffrement par enregistrement et mises en gage de tables de clés et valeurs pour de grandes entrées Ferran Alborch Escobar – Computational Differential Privacy for Encrypted Databases Supporting Linear Queries		15h40-16h40 Clémence Bouvier - Anemoi: Exploiting the Link between Arithmetization-Oriented and CCZ-Equivalence Margarita Cordero – On Impossible Boomerang Attacks Jules Baudrin – Commutative Cryptanalysis Made Practical	
Pause café	Pause café		Pause café	
17h – 18h30 Jean Gasnier – An Algebraic Point of View on the Generation of Pairing-Friendly Curves Arthur Herlédan Le Merdy – Le problème EndRing connaissant un endomorphisme Pierriek Dartois – Signing with higher dimensional isogenies Abel Laval – Malleable commitments from group actions and zero-knowledge proofs for circuits based on isogenies Sabrina Kunzweiler – Efficient Computation of $(3^n, 3^n)$ -isogenies Dimitri Koshelev – Subgroup membership testing on elliptic curves via the Tate pairing	17h – 18h30 Kayodé Epiphane Nouetowa – Décodage itératif des codes cycliques tordus Martin Scotti – On the lower bound for the length of minimal codes Virginio Fratiani – The Dual and the Hull code in the framework of the two generic constructions Charles Meyer-Hilfiger - Rigorous Foundations for Dual Attacks in Coding Theory Bastien Pacifico – Une approche pour introduire la localité dans les codes AG généralisés Rakhi Prathar - Generalized rank weights and Betti numbers	17h – 18h30 Lucas Ottow – Calculs distribués sécurisés sur polynômes et applications à Private Set Intersection et problèmes connexes Dinh Duy Nguyen – Verifiable Decentralized Multi-Client Functional Encryption for Inner Product River Moreira Ferreira – Toward Threshold UOV Agathe Beaugrand – Private intersection-sum and ZK-proof of shuffle Jules Maire – Efficient Zero-Knowledge Arguments and Digital Signatures via Sharing Conversion in the Head Thomas Lavaur – Modular zk-Rollup On-Demand		
		17h30-18h30 Table ronde – Politique, cryptographie et nouvelles régulations		
		20h30 AG C2		

