

Prime Numbers and Automatic Sequences : Determinism and
Randomness
Nombres premiers et suites automatiques : aléa et déterminisme

CIRM, Marseille, 22-26 May 2017

Schedule / Programme

Sunday (21/5)

17:00–23:00 Reception at CIRM / Accueil au CIRM
19:00–22:00 Cold buffet / Buffet froid

Monday (22/5)

7:00–9:00 Breakfast

9:30–10:15 **Yann Bugeaud (Université de Strasbourg):** On the representation of real numbers to distinct bases

10:15–10:45 Coffee Break

10:45–11:30 **Teturo Kamae (Osaka City University):** Selection rules preserving normality

11:30–12:15 **Adrian Scheerer (TU Graz):** Computable absolutely normal numbers and discrepancies

12:30–15:00 Lunch Break

15:00–15:45 **Maciej Ulas (Jagiellonian University):** 2-adic valuations of coefficients of certain integer powers of formal power series with $\{-1, +1\}$ coefficients

15:45–16:30 **Manfred Madritsch (Université de Lorraine):** The sum-of-digits function of linearly recurrent number systems and almost primes

16:30–17:00 Coffee Break

17:00–17:45 **Cathy Swaenepoel (Aix-Marseille Université):** Digits in finite fields

17:45–18:30 **Gautier Hanna (Aix-Marseille Université):** On the digits of primes

19:30–20:30 Dinner

Tuesday (23/5)

- 7:00–9:00 Breakfast
- 9:30–10:15 **Janos Pintz (Hungarian Academy of Sciences):** The distribution of Zeta-zeros and the remainder term of the prime number theorem
- 10:15–10:45 Coffee Break
- 10:45–11:30 **Christoph Aistleitner (TU Graz):** Extreme values of the Riemann zeta function via the resonance method
- 11:30–12:15 **Sary Drappeau (Aix-Marseille Université):** Values of polynomials without large prime factors
- 12:30–15:00 Lunch Break
- 15:00–15:45 **James Maynard (Magdalen College, Oxford):** Large gaps between primes in subsets
- 15:45–16:30 **Alexander Mangerel (University of Toronto):** Some rigidity theorems for multiplicative functions
- 16:30–17:00 Coffee Break
- 17:00–17:45 **Elie Goudout (IMJ - Paris Rive Gauche):** Majoration du nombre d'entiers n tels que $\omega(n) = k_1$ et $\omega(n + 2) = k_2$
- 19:30–20:30 Dinner

Wednesday (24/5)

- 7:00–9:00 Breakfast
- 9:00–9:45 **Zeev Rudnick (Tel-Aviv University):** Angles of Gaussian primes
- 9:45–10:30 **Máté Wierdl (University of Memphis):** Random differences for arithmetic progressions in the primes
- 10:30–10:45 Coffee Break
- 10:45–11:30 **Anne de Roton (Université de Lorraine):** Small sumsets in continuous and discrete settings
- 11:30–12:15 **Lucile Devin (Université Paris-Sud):** Généralisations des biais de Chebyshev
- 12:30–15:00 Lunch Break
- 15:00–19:30 *Free afternoon*
- 19:30–20:30 Dinner

Thursday (25/5)

- 7:00–9:00 Breakfast
- 9:30–10:15 **Ramachandran Balasubramanian (IMSc Chennai):** Poisson distribution of a prime counting function corresponding to elliptic curves
- 10:15–10:45 Coffee Break
- 10:45–11:30 **Youness Lamzouri (York University):** Large character sums
- 11:30–12:15 **Zhiwei Wang (Université de Lorraine):** On the largest prime factors of consecutive integers
- 12:30–15:00 Lunch Break
- 15:00–15:45 **Sigrid Grepstad (University of Linz):** Bounded remainder sets for the discrete and continuous irrational rotation
- 15:45–16:30 **Asaki Saito (Future University Hakodate):** Pseudorandom number generator based on the binary expansion of algebraic integers and its p -adic analogue
- 16:30–17:00 Coffee Break
- 17:00–17:45 **Jun-Ichi Tamura (Tsuda College):** Convergence theorems of substitutions and Rauzy fractals in the p -adic world
- 17:45–18:30 **Shin-Ichi Yasutomi (Toho University):** Multidimensional p -adic continued fraction algorithms
- 19:30–22:30 Dinner: Bouillabaisse

Friday (26/5)

- 7:00–9:00 Breakfast
- 9:30–10:15 **Shanta Laishram (Indian Statistical Institute):** On the sums of the digits in bases 2 and 3
- 10:15–10:30 Coffee Break
- 10:30–11:15 **Yining Hu (IMJ - Paris Rive Gauche):** Subword complexity and non-automaticity of certain completely multiplicative functions
- 11:15–12:00 **Clemens Müllner (TU Wien):** Möbius orthogonality for the Zeckendorf sum-of-digits function
- 12:00–12:30 *Final discussions*
- 12:30–15:00 Lunch Break