

Schedule of the JAM 2025 International Conference

April 14–16, 2025, Presidency of Moulay Ismaïl University, Meknès-Morocco

Session on April 17 at ENSAM, Meknès

Session on April 18 at Faculty of Sciences, Meknès

Monday, April 14th, 2025

Afternoon — Presidency of Moulay Ismaïl University, Conference Room

13h30– 14h25 Registration and reception of participants

14h30–15h30 **Opening Ceremony**

15h30–16h00 Coffee Break

Chair : Mohammed TAOUS

16h00–16h50 **Bouchaïb SODAÏGUI** (Polytechnic University of Hauts-de-France, Valenciennes-France)
"Steinitz classes of unramified Galois extensions"

17h00–17h50 **Ali MOUHIB** (Sidi Mohamed Ben Abdellah University, FP, Taza-Morocco)
"On the structure of the unramified abelian Iwasawa module of some cyclic number fields"

Tuesday, April 15th, 2025

Morning — Presidency of Moulay Ismaïl University, Conference Room

Chair : Abbas Chazad MOVAHHEDI

09h00–09h50 **Michel WALDSCHMIDT** (Sorbonne University, France)
"Représentation des entiers par des familles de formes binaires"

10h00–10h30 **Abdelkader ZEKHNINI** (Mohammed First University, FS, Oujda-Morocco)
"On the Hilbert 2-class field of some real quadratic number fields"

10h30–11h00 Coffee Break

11h00–11h50 **Abdelmejid BAYAD** (Paris-Saclay University, Paris-France)
"Séries d'Eisenstein associées aux caractères de Legendre et les congruences de Ramanujan"

12h00–12h30 **Mhammed BOULAGOUAZ** (Sidi Mohamed Ben Abdellah University, Fez-Morocco)
"Sur la clôture intégrale d'un anneau gradué"

12h30–14h30 *Lunch*

Afternoon — Presidency of Moulay Ismaïl University

Parallel Sessions — Presidency of Moulay Ismaïl University

Session 1 — Chair : Ali MOUHIB

14h30–14h45 *Abdellah SBAI* (FS, Oujda-Morocco)
"On the Iwasawa λ -invariant of some imaginary number fields"

14h50–15h05 *Mohammed ELMOUHIB* (FS, Oujda-Morocco)
"About Pólya fields and Iwasawa towers"

15h10–15h25 *Anass DRIWACH* (FS, Meknès-Morocco)
"On the vanishing of the twisted Kummer-Leopoldt constant"

15h30–15h45 *Donghyeok LIM* (Korean National University of Education, Korea)
"The finitude of tamely ramified pro- p -extensions with cyclic p -class groups"

15h50–16h05 *Abdelghani ASSARRAR* (FP, Taza-Morocco)
"On the unramified abelian Iwasawa module of some number fields"

Session 2 — Chair : Mounir HAJLI

14h30–14h45 *Jalal DIDI* (FP, Taza-Morocco)
"On the index divisors and monogeneity of a certain class of polynomials defined by $x^8 + ax^5 + b$ "

14h50–15h05 *Mounir HAYANI* (Institute of Mathematics, Bordeaux-France)
"Characterization of Extreme Cases of the Chebyshev's Bias in Number Fields"

15h10–15h25 *Abderazak SOULLAMI* (FST, Errachidia-Morocco)
"An infinite family of trace-free monogenic trinomials"

15h30–15h45 *Brahim BOUDINE* (FS, Meknès-Morocco)
"Arithmetical contribution on perfect graphs"

15h50–16h05 *Miloud EZ-ZINBI* (FSS, Marrakech-Morocco)
"Nagata-type automorphisms over a principal ideal domain"

16h10–16h40 Coffee break

Session 1 — Chair : Mohamed TALBI

- 16h40–16h55** Ayoub AL URTASSI (FS, Meknès-Morocco)
"The 2-part of class group of pure quartic number fields"
- 17h00–17h15** Abdellah EL ATTRASSI (FS, Oujda-Morocco)
"Sur la formule explicite de Riemann et la fonction de répartition des nombres premiers"
- 17h20–17h35** Mohammed TAMIMI (FS, Oujda-Morocco)
"Capitulation in the unramified extensions of the field $\mathbb{K} = \mathbb{Q}(\sqrt{2p\varepsilon_0\sqrt{\ell}})$ where $\ell \equiv 1 \pmod{8}$ and $p \equiv 1 \pmod{4}$ "
- 17h40–17h55** Elkamla BOUFARAA (FS, Oujda-Morocco)
"Idéaux réduits de quelques corps quartiques purs"

Session 2 — Chair : Samir BOUCHIBA

- 16h40–16h55** Abdessamad AHOUITA (FSS, Marrakech-Morocco)
"Structure of the automorphism group of Danielewski-type surfaces"
- 17h00–17h15** Hatim LABTAINI (FSS, Marrakech-Morocco)
"the freeness property for locally nilpotent derivation on Danielewski varieties"
- 17h20–17h35** Ahmed CHIBLOUN (FS, Meknès-Morocco)
"On the A property of certain rings"
- 17h40–17h55** Brahim BOULAYAT (FSS, Marrakech-Morocco)
"The IDF property in semi-group rings"

Wednesday, April 16th, 2025

Morning — Presidency of Moulay Ismaïl University, Conference Room

Chair : Hassan OUKHABA

- 09h00–09h50** Cornelius GREITHER (University of Bundeswehr, Munich-Germany)
Groupes de classes comme modules galoisiens pour quelques extensions non abéliennes

10h00–10h30 **Mohammed Amin AMRI** (Ibn Tofail University, Morocco)
"Generalized Sato-Tate conjecture, motivation and arithmetic consequences"

10h30–11h00 *Coffee Break*

11h00–11h40 **Saad EL BOUKHARI** (Moulay Ismaïl University, Meknès-Morocco)
"Higher special elements and equivariant annihilators of class groups"

Parallel Sessions — Presidency of Moulay Ismaïl University

Session 1 — Chair : Mohammed TALBI

12h00–12h15 *Soumia BHIHI* (FS, Meknès-Morocco)
"Mumford curves, automorphic forms and applications"

12h20–12h35 *Omar KCHIT* (ENS, Fez-Morocco)
"Constructing infinite families of number fields with given indices from quintinomials"

12h40–12h55 *Rafik SOUANEF* (Marie and Louis Pasteur University, Rennes-France)
" $\mathbb{Z}$ -bases and $\mathbb{Z}[1/2]$ -bases for Washington's cyclotomic units of real cyclotomic fields and totally deployed fields"

Session 2 — Chair : Siham AOUISSI

12h00–12h15 *Aziz JAARI* (FS, Meknès-Morocco)
"On the coclass and coclass graphs"

12h20–12h35 *Hamza BOUBKER* (FS, Oujda-Morocco)
"On Euclidean ideal classes in real biquadratic fields"

12h40–12h55 *Youness ERRADI* (FS, Meknès-Morocco)
"Dedekind's criterion and monogeneity of a family of relative number fields"

13h00–14h30 *Lunch*

Thursday, April 17th, 2025

Morning — ENSAM, Conference Room

Chair : Bouchaïb SODAÏGUI

09h00–09h50 **Abderrahmane NITAJ** (Caen Normandie University, France)
"The last decade of the RSA cryptosystem"

10h00–10h30 *Coffee Break*

10h30–11h15 **Hussain BEN-AZZA** (Moulay Ismaïl University, Meknès-Morocco)
"Hiding Codes into Graphs"

11h15–12h00 **Mounir HAJLI** (Westlake University, China)
"On Theta Invariants, Zeta Functions and the Volume Function on Arithmetic Varieties"

12h00–14h00 *Lunch*

Afternoon — ENSAM, Conference Room

Chair : Mohamed BENDAOU

14h00–14h40 **Abdelaziz RAOUI** (Cadi Ayyad University, Marrakech-Morocco)
"Some methods in analytic and probabilistic number theory"

14h50–15h20 **Ali KACHA** (Ibn Tofail University, Kénitra-Morocco)
"On the transcendence of some continued fractions"

15h30–16h00 **Salah NAJIB** (Sultan Moulay Slimane University, Khouribga-Morocco)
"Des entiers vers les polynômes"

16h00–16h30 *Coffee Break*

Parallel Sessions — ENSAM

Session 1, Conference Room — Chair : Abdelmejid BAYAD

16h40–16h55 **Azddine ADDADI** (ENSAM, Meknès-Morocco)
"Information Geometry for Channel Capacity"

17h00–17h15 **Saber DARMOUN** (ENS, Fez-Morocco)
"About Linear Codes Heights"

17h20–17h35 **Noureddine ESSAIDI** (FST, Al Hoceima-Morocco)
"On concatenating three entanglement-assisted quantum codes"

17h40–17h55 **Khalid KHALLOUKI** (FS, Ben M'Sik-Morocco)
"Attaques sur le problème du logarithme discret (DLP et ECDLP)"

18h00–18h15 **Amine MARZOUKI** (FS, Meknès-Morocco)
"Counting points on an elliptic curve over finite fields"

Session 2, Lecture Hall A3 — Chair : Abdelaziz RAOUJ

16h40–16h55	Mbarek HAYNOU (FST, Errachidia-Morocco) <i>"Structured distributions of class groups of some real pure quartic fields"</i>
17h00–17h15	Abderrahim MAKKI NACIRI (FSS, Marrakech-Morocco) <i>"On the variant $n! = P(x)$ of the Brocard-Ramanujan Diophantine equation with k-free integers"</i>
17h20–17h35	Sarra AHALLAL (FS, Kénitra-Morocco) <i>"Transcendence of some p-adic continued fractions"</i>
17h40–17h55	Omar LABIHI (FSS, Marrakech-Morocco) <i>"Asymptotic evaluation of some arithmetic functions"</i>
18h00–18h15	Mohamed BENELMEKKI (FST, Beni Mellal-Morocco) <i>"On antimatter group algebras"</i>

Friday, April 18th, 2025

Morning — Faculty of Sciences, Conference Room

Chair : Cornelius GREITHER

09h00–09h50	Abbas Chazad MOVAHHEDI (Limoges University, France) <i>"Signature maps in number fields"</i>
10h00–10h30	Coffee Break
10h30–11h20	Hourong QIN (School of Mathematics, Nanjing University, China) <i>"A connection between the Milnor K_2 group and the Shafarevich-Tate group"</i>
11h30–12h20	Hassan OUKHABA (Franch-Comté University, Besançon-France) <i>"Sur certaines extensions abéliennes de corps locaux en égale caractéristique"</i>

End of the "4èmes Journées Arithmétiques de Meknès"

12h30–14h30	Lunch
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