

ZAGREB, CROATIA, SEPTEMBER 18 – 22, 2023
MODULAR CURVES AND GALOIS REPRESENTATIONS

Program

The conference is held at Department of Mathematics, University of Zagreb, Bijenička cesta 30. All talks take place in room A002 on the ground floor.

Monday, September 18, 2023

	Morning session
8:30 - 8:55	Registration
8:55 - 9:00	Opening and Announcements
9:00 - 9:50	<i>Finite flat group schemes over \mathbb{Z} and GRH</i> René Schoof
10:00 - 10:25	<i>Automorphism group of Cartan modular curves</i> Pietro Mercuri
10:25 - 10:55	coffee break
10:55 - 11:45	<i>Primitive points on elliptic curves</i> Peter Stevenhagen
11:55 - 12:20	<i>Serre's Uniformity Question and proper subgroups of $C_{ns}^+(p)$</i> Lorenzo Furio
12:20 - 14:00	lunch break
	Afternoon session
14:00 - 14:50	<i>Unified treatment of Artin-type problems</i> Antonella Perucca
15:00 - 15:25	<i>Rational Cuspidal Points on the Modular Jacobians $J_H(p)$</i> Elvira Lupoian
15:25 - 15:50	coffee break
15:50 - 16:40	<i>Counting rational points on modular curves of genus 0 over number fields</i> Peter Bruin
16:50 - 17:15	<i>Anticyclotomic Iwasawa theory and the Birch–Swinnerton-Dyer conjecture for analytic rank 1 at Eisenstein primes of good and bad multiplicative reduction</i> Timo Keller

Tuesday, September 19, 2023

	Morning session
9:00 - 9:50	<i>p-adic Arakelov theory and quadratic Chabauty</i> Steffen Müller
10:00 - 10:25	<i>Computing p-adic heights on hyperelliptic curves</i> Stevan Gajović
10:25 - 10:50	coffee break
10:50 - 11:40	<i>Finding low degree places on $X_1(N)$</i> Mark van Hoeij
11:50 - 12:15	<i>On the p-isogenies of elliptic curves with multiplicative reduction over quadratic fields</i> George Ţurcaş
12:15 - 14:00	lunch break
	Afternoon session
14:00 - 14:50	<i>An Algorithm for Isolated j-invariants</i> Abbey Bourdon
15:00 - 15:25	<i>Restrictions on endomorphism algebras</i> Pip Goodman
15:25 - 15:55	coffee break
15:55 - 17:00	<i>Lightning talks</i>

Lightning talks:

1. Ahmad El-Guindy: *Some p-adic properties of modular forms with Nebentypus and p-regular partitions*
2. Franco Madriaga: *About the equation $x^4 + dy^2 = z^p$*
3. Ignasi Sanchez: *An effective algorithm for comparing residually reducible 2-adic Galois representations*
4. Katerina Santicola: *A converse of Faltings' Theorem*
5. Ivan Soldo: *$D(-1)$ -quadruples extending certain pairs in imaginary quadratic rings*
6. Kenji Terao: *Maps between isolated points on modular curves*
7. Robin Visser: *Abelian surfaces with good reduction away from 2*

ZAGREB, CROATIA, SEPTEMBER 18 – 22, 2023
MODULAR CURVES AND GALOIS REPRESENTATIONS

Wednesday 20, 2023

	Morning session
9:00 - 9:50	<i>Modular curves with infinitely many points of degree 3 or 4</i> Daeyeol Jeon
10:00 - 10:50	<i>Hyperelliptic and Trigonal modular curves in positive characteristic</i> Maarten Derickx
10:50 - 11:20	coffee break
11:20 - 12:10	<i>Determining biellipticity for quotient modular curves</i> Francesc Bars
12:20 - 12:45	<i>Modular curves $X_0(N)$ with infinitely many points of degree d</i> Petar Orlić
	Free afternoon

ZAGREB, CROATIA, SEPTEMBER 18 – 22, 2023
MODULAR CURVES AND GALOIS REPRESENTATIONS

Thursday, September 21, 2023

	Morning session
9:00 - 9:50	<i>Local-global trace relations and their implications</i> Ekin Özman
10:00 - 10:25	<i>Low degree points on modular curves and their quotients</i> Nikola Adžaga
10:25 - 10:55	coffee break
10:55 - 11:45	<i>Torsion groups of elliptic curves over quadratic fields $\mathbb{Q}(\sqrt{d})$ for $d < 500$</i> Barinder Banwait
11:55 - 12:20	<i>Rational points on Atkin-Lehner quotients of geometrically hyperelliptic Shimura curves</i> Oana Padurariu
12:20 - 14:00	lunch break
	Afternoon session
14:00 - 14:50	<i>Report on the CM case: torsion points, Galois representations and modular curves</i> Pete Clark
14:50 - 15:20	coffee break
15:20 - 16:10	<i>Modular Curves in the LMFDB</i> David Roe
19:30	Conference dinner

ZAGREB, CROATIA, SEPTEMBER 18 – 22, 2023
MODULAR CURVES AND GALOIS REPRESENTATIONS

Friday, September 22, 2023

	Morning session
9:15 - 10:05	<i>The rational torsion subgroup of $J_0(N)$</i> Hwajong Yoo
10:15 - 11:05	<i>Hilbert's Irreducibility, Modular Forms, and Computation of Certain Galois Groups</i> Goran Muić
11:05 - 11:35	coffee break
11:35 - 12:25	<i>Minimal images of Galois for elliptic curves</i> Jeremy Rouse
	End of Conference