

CONFERENCE ON DIOPHANTINE  $m$ -TUPLES AND RELATED PROBLEMS III  
ZAGREB, CROATIA, SEPTEMBER 14 – 16, 2022

## Program

The conference is held at the Faculty of Civil Engineering, University of Zagreb, Fra Andrije Kačića-Miošića 26. All talks take place in room 121 on the first floor.

### Wednesday, September 14, 2022

9:00 - 9:50	Registration
9:50 - 10:00	Opening
<b>Morning session</b>	
10:00 - 10:50	<i>On Diophantine pairs</i> Alain Togbé
10:50 - 11:20	Coffee break
11:20 - 11:50	<i><math>D(4)</math>-triples with two largest elements in common</i> Marija Bliznac Trebješanin
11:50 - 12:20	<i>On the regularity of the <math>D(4)</math>-quadruples in <math>\mathbb{Z}[X][i]</math></i> Sanda Bujačić Babić
12:20 - 14:00	Lunch break
<b>Afternoon session 1</b>	
14:00 - 14:30	<i>On <math>D(-1)</math>-tuples in the ring <math>\mathbb{Z}[\sqrt{-k}]</math>, <math>k &gt; 0</math></i> Ivan Soldo
14:30 - 15:00	<i>Asymptotics of <math>D(q)</math>-pairs and triples</i> Goran Dražić
15:00 - 15:30	Coffee break
<b>Afternoon session 2</b>	
15:30 - 16:00	<i>Applications of Pellian equations of a special type</i> Mirela Jukić Bokun
16:00 - 16:30	<i>Representation of integers of the form <math>x^2 + ky^2 - lz^2</math></i> Supawadee Prugsapitak

**Thursday, September 15, 2022**

<b>Morning session</b>	
10:00 - 10:50	<i>D(n)-tuples for several n's</i> Andrej Dujella
10:50 - 11:20	Coffee break
11:20 - 11:50	<i>D(n)-quintuples with square elements</i> Vinko Petričević
11:50 - 12:20	<i>Diophantine triples with non-uniform recurrences</i> László Szalay
12:20 - 14:00	Lunch break
<b>Afternoon session 1</b>	
14:00 - 14:50	<i>On X and Y coordinates of Pell equations in various sequences</i> Florian Luca
14:50 - 15:20	<i>On the comparison between the value of the divisor function to its value at Euler's function</i> Djamel Bellaouar
15:20 - 15:50	Coffee break
<b>Afternoon session 2</b>	
15:50 - 16:40	<i>On the regularity of Diophantine triple with degree 1</i> Bo He
16:40 - 17:10	<i>The extension of the D(-k)-triple {1, k, k + 1} to a quadruple</i> Kouèssi Norbert Adédji
19:00	Conference dinner

**Friday, September 16, 2022**

<b>Morning session</b>	
10:00 - 10:50	<i>On the solutions of a class of generalized Fermat equations signature (2, 2n, 3)</i> Gökhan Soydan
10:50 - 11:20	Coffee break
11:20 - 11:50	<i>Longer gaps between values of binary quadratic forms</i> Christian Elsholtz
11:50 - 12:20	<i>Integer points on elliptic curves induced by a family of Diophantine triples involving balancing numbers</i> Artatrana Suna
12:20 - 12:30	Closing
12:30 - 14:00	Lunch break