# FOURTEENTH INTERNATIONAL CONFERENCE ON FIBONACCI NUMBERS AND THEIR APPLICATIONS

Mathematical Institute UNAM, Morelia, Mexico July 5–9, 2010

### Monday, July 5 – First Day of the Conference

8:30-9:15	Pick up packets and say hello
9:15 - 9:30	Welcome and announcements
Monday Morning	g Session – moderated by William A. Webb

	Time	Title	Author
	9:30 - 9:55	The $k$ -Zeckendorf array	C. Cooper
	9:55 - 10:20	The Wytoff triangle and unique representations of positive	C. Kimberling
	integers		
	10:20-10:45	Crossing numbers for Fibonacci distance graphs	H. Harborth
	10:45 - 11:10	Some specific Binet forms for higher-dimensional Jacob-	C. Cook
sthal and other recurrence relations		R. A. Hillman <sup>*</sup>	
			G. E. Bergum
	11:10-11:35	Tetrabons: The fundamental regions of a three-space Zeck-	P. G. Anderson
	en	dorf representation	
	11:35-12:00	Coffee Break	
	12:00-12:25	Continued fractions consisting of alternating string pat-	R. J. Hendell
terns			
	12:25 - 12:50	Non-overlap property of the Thue-Morse sequence	T. Cusick
			P. Stănică <sup>*</sup>
	12:50-1:15	Representing positive integers as a sum of linear recurrence	N. Hamlin <sup>*</sup>
	sec	quences	W. A. Webb
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1:15–3:00 Lunch break

## Monday Afternoon Session – moderated by Florian Luca

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## Tuesday Morning Session – moderated by Peter Anderson

Time	Title	Author
9:30 - 9:55	Matrices with forbidden submatrices	W. A. Webb <sup>*</sup>
9:55-10:20	Slicing the Menger Sponge	P. Stockmeyer
10:20-10:4	5 Lucas sequences with discriminant $-3$ times a square	C. Ballot
10:45 - 11:1	0 Large values of some arithmetic functions	M. O. Hernane <sup>*</sup>
		J. L. Nicolas
11:10-11:3	5 Arithmetic progressions in the $y$ -coordinates of certain el-	A. Alvarado
	liptic curves	
11:35-12:0	0 Coffee Break	
12:00-12:2	5 A new characterization of Fibonacci numbers	A. Pínter <sup>*</sup>
		V. Ziegler
12:25 - 12:5	0 About $(a, b)$ -type balancing numbers	K. Liptai
12:50-1:15	Further generalizations of the Fibonacci-coefficient poly-	M. Ferenc
	nomials	
1:15 - 3:00	Lunch break	
Tuesday Afternoon Session – moderated by Clark Kimberling		
3:00-3:25	On the nearest integer of the sum of the reciprocals of	T. Komatsu
	Fibonacci numbers	

- 3:25–3:50 On arithmetic properties of a generalized difference oper- K. Ozeki ator
- 3:50–4:15 Optimal Strategy for Defending A Chain in *Risk* D. Glass
- $4{:}15{-}4{:}45 \qquad Coffee \ Break$

The Edouard Lucas Invited Lecture

Auditorium

5:30–6:30 Combinatorial Trigonometry (and a method to DIE for) A. Benjamin

# Wednesday Morning Session – moderated by Curtis Cooper

Time	Title	Author
9:30 - 9:55	The Combinatorialization of Linear Recurrences	A. Benjamin <sup>*</sup>
		H. Derks
		J. Quinn
9:55 - 10:20	Block tridiagonal matrices and Fibonacci numbers	A. Yalçiner
10:20-10:45	Generating matrices of C-nomial coefficients and their spec-	E. Kilic
$\operatorname{tra}$		P. Stănică <sup>*</sup>
10:45 - 11:10	More on Fibonomials	C. Pita
11:10-11:35	Tiling Rectangles, Cylinders, Tori, Möbius Strips, and	P. G. Anderson
	ein Bottles	
11:35-12:00	Coffee Break	
12:00-12:25		P. T. Young
12:25 - 12:50	Extending the GCD Star of David Theorem to more than	C. Long
	o GCDs	
12:50-1:15	Hexahexaflexagons: A mathematical ramble	M. Bicknell-Johnson*
		C. P. Spears
1:15 - 1:40	Workshop: Fold your own Hexahexaflexagon	M. Bicknell-Johnson*
		F. Johnson <sup>*</sup>
1:40-3:00	Lunch break	
	Wednesday Afternoon	
3:00-3:05	Group Photo	
3:05-6:00	Organized tour of Morelia	
6:30-9:30	Conference Banquet at Restaurant Villa Montaña	

# Thursday Morning Session – moderated by Pantelimon Stănică

Time	Title	Author
9:30-9:55	Mod $p^3$ analogues of theorems of Gauss and Jacobi on	J. B. Cosgrave
bin	omial coefficients	K. Dilcher <sup>*</sup>
9:55 - 10:20	On the binary expansion of the odd Catalan numbers and	F. Luca
<i>p</i> -a	dic congruences for $p^q$ -Catalan numbers	P. T. Young <sup>*</sup>
-	The "Magicness" of powers of some magic squares	M. R. Bacon
		C. Cook <sup>*</sup>
		R. Hillman
10:45-11:10	Large alternating subsets and successions	A. Munagi
11:10-11:35	On odd perfect numbers of special forms	L. Gallardo
	<b>1</b>	O. Rahavandrainy
11:35 - 12:00	Coffee Break	v
12:00-12:25	On triunitary and tetraunitary numbers	L. Bardomero <sup>*</sup>
		D. Iannucci
12:25-12:50	On triunitary and tetraunitary numbers II	L. Bardomero
	v v	D. Iannucci <sup>*</sup>
12:50-1:15	Multiperfect Fibonacci numbers	K. Broughan
	1	M. González
		R. Lewis
		F. Luca <sup>*</sup>
		V. J. Mejía Huguet

A. Togbé

#### 1:15–3:00 Lunch break

## Thursday Afternoon Session – moderated by Karl Dilcher

3:00-3:25	Growth Rates of Recurrence Sequences with Periodic Co-	Karyn McLellan
	efficients	
3:25 - 3:50	Asymptotic behavior of solutions to min-max recurrences	K. S. Berenhaut
	of higher-order	E. M. Magargee <sup>*</sup>
		S. M. Rabidoux
3:50-4:15	Fibonacci-type piecewise linear recurrences and general-	K. S. Berenhaut
	ized Ramanujan-Nagell equations	E. M. Magargee
		B. Stancil <sup>*</sup>
3:50-4:15	An Application of Recursive Sequences to Expansions for	K. S. Berenhaut
	Distributions of Sums of Random Variables	R. Hilton <sup>*</sup>
4:15-4:40	Coffee Break	
4:40-5:05	An Application of Recursive Sequences to Expansions for	K. S. Berenhaut
	Distributions of Sums of Random Variables	R. Hilton $^*$
5:05-5:30	Asymptotic Behavior of Solutions to Symmetric Rational	K. S. Berenhaut
	Recurrences	A. Jones <sup><math>*</math></sup>
6:00-9:00	Mexican fiesta at Florian's house	
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# Friday Morning Session – moderated by Florian Luca

#### Author

Time	Title	Author
9:30 - 9:55	Waring type problem involving Fibonacci numers in fields	V. C. García <sup>*</sup>
of	prime order	F. Luca
		V. J. Mejía Hu
9:55 - 10:20	Fibonacci numbers divisible by their indices	J. J. Alba Gon
		F. Luca
		C. Pomerance
10:20-10:45	Fibonacci, Riesel and Sierpiński	F. Luca
		V. J. Mejía Hu
10:45 - 11:10	Smooth values of $x^2 \pm 2$	S. Guzman
11:10-11:35	Fibonacci numbers which are sums of two repdigits	S. D. Alvarado
		F. Luca
11:35-12:00	Coffee Break	
12:00-12:25	Fibonacci Integers	F. Luca <sup>*</sup>
		C. Pomerance
		S. Wagner
12:25 - 12:50	Problem Session	C. Kimberling
12:50-1:15	Business meeting	W. A. Webb
1:15-3:00	Lunch break	
3:00-6:00	Board meeting	

# Saturday

10:00-5:00 Trip To Patzcuaro V. C. García<sup>\*</sup> F. Luca V. J. Mejía Huguet J. J. Alba González\* F. Luca C. Pomerance F. Luca V. J. Mejía Huguet\* S. Guzman S. D. Alvarado<sup>\*</sup> F. Luca F. Luca<sup>\*</sup> C. Pomerance S. Wagner