

## Thursday, 7 November 2019

**18:00** *Get together and registration at **Bobberts** (Neuer Platz 3, Downtown Paderborn)*

## Friday, 8 November 2019

**08:30** *Registration*

**09:00 - 09:05** *Opening*

**09:05 - 10:00** **Benny Sudakov (Zurich)**  
“Halfway to Rota’s basis conjecture”

**10:00 - 10:30** *Coffee break*

**10:30 - 12:05** **Parallel sessions**

**12:05 - 13:15** *Lunch*

**13:15 - 14:50** **Parallel sessions**

**14:50 - 15:20** *Coffee break*

**15:20 - 16:15** **Nicole Megow (Bremen)**  
“Combinatorial optimization with explorable uncertainty”

**16:15 - 16:25** *Short break*

**16:25 - 17:20** **Alexander Pott (Magdeburg)**  
“Almost perfect nonlinear functions”

**19:00** *Dinner at **Bobberts** (Neuer Platz 3, Downtown Paderborn)*

## Saturday, 9 November 2019

**08:45 - 10:20** **Parallel sessions**

**10:20 - 10:50** *Coffee break*

**10:50 - 12:25** **Parallel sessions**

**12:25 - 13:25** *Lunch*

**13:25 - 14:20** **Miguel Angel Fiol (Barcelona)**  
“Spectra and eigenspaces of arbitrary lifts of graphs”

**14:20 - 14:40** *Coffee break*

**14:40 - 15:35** **Marco Buratti (Perugia)**  
“A feast of combinatorial designs”

**15:35 - 15:40** *Farewell*

## Detailed program on Friday

8 November 2019

Time	Section I	Section II	Section III	Section IV
	Room: A	Room: B	Room: C	Room: D
09:00 - 09:05	<i>Opening</i> Room: A			
09:05 - 10:00	<b>Benny Sudakov</b> Halfway to Rota's basis conjecture			Room: A
10:00 - 10:30	<i>Coffee break</i>			
10:30 - 10:50	<b>D. Labbate</b> 1 Extending perfect matchings to hamiltonian cycles in line graphs.	<b>T. Schweser</b> 2 Critical digraphs	<b>H. Bergold</b> 3 Topological drawings meet classical theorems of convex geometry	<b>S Piddock</b> 4 Finding marked vertices with quantum walks
10:55 - 11:15	<b>J.P. Zerafa</b> 5 Extending perfect matchings to hamiltonian cycles in $L(K_n)$ and $L(K_{m,m})$	<b>J. Wiehe</b> 6 The chromatic polynomial of a digraph	<b>P. Goetschalckx</b> 7 Local orientation-preserving symmetry preserving operations on polyhedra	<b>U. Tamm</b> 8 Blockchain infrastructure: problems with cryptography and mining
11:20 - 11:40	<b>J. Rollin</b> 9 Induced arboricity	<b>W. Hochstättler</b> 10 A semi-strong perfect digraph theorem	<b>N. Van Cleemput</b> 11 4-connected polyhedra have at least a linear number of hamiltonian cycles	<b>C. Deppe</b> 12 Bounds for the capacity error function for unidirectional channels with feedback
11:45 - 12:05	<b>S. Glock</b> 13 Resolution of the Oberwolfach problem	<b>M. Sonntag</b> 14 Nearly all trees are edge intersection hypergraphs of 3-uniform hypergraphs	<b>M. Winter</b> 15 Edge-transitive polytopes	<b>S. Gharibian</b> 16 Almost optimal classical approximation algorithms for a quantum generalization of Max-Cut
12:05 - 13:15	<i>Lunch</i>			

## Detailed program on Friday

8 November 2019

Time	Section I Room: A	Section II Room: B	Section III Room: C	Section IV Room: D
13:15 - 13:35	<b>D.R. Silaban</b> 17 Restricted size ramsey number for graph of $P_3$ versus small trees	<b>S. Mohr</b> 18 $X$ -minors and $X$ -spanning subgraphs	<b>H. Harborth</b> 19 Saturated vertex-to-vertex packings of integral triangles	<b>Y. Mogge</b> 20 Connector-breaker games on random boards
13:40 - 14:00	<b>M. Geisser</b> 21 On some new optimal $\chi$ -binding functions for $(P_5, H)$ -free graphs	<b>M. Hatzel</b> 22 Avoidable paths in graphs	<b>F. Joos</b> 23 Decompositions of graphs	<b>K. Jansen</b> 24 On integer programming and convolution
14:05 - 14:25	<b>I. Schiermeyer</b> 25 Polynomial $\chi$ -binding functions for $P_5$ -free graphs	<b>F. Schröder</b> 26 New $p$ -centered colorings for sparse graphs	<b>G. Istrate</b> 27 The Ulam-Hammersley problem for finite partial orders.	<b>L. Nölke</b> 28 Online matching on the line with recourse
14:30 - 14:50	<b>K. Wijaya</b> 29 The subdivision of Ramsey minimal graphs of matching versus path on five vertices	<b>R. Lukořka</b> 30 Short cycle covers of graphs	<b>D. Frettlöh</b> 31 Bounded distance equivalence in substitution tilings	<b>K. Grage</b> 32 EPTAS for machine-scheduling with bag-constraints
14:50 - 15:20	<i>Coffee break</i>			
15:20 - 16:15	<b>Nicole Megow</b> Combinatorial optimization with explorable uncertainty			<b>Room: A</b>
16:15 - 16:25	<i>Short break</i>			
16:25 - 17:20	<b>Alexander Pott</b> Almost perfect nonlinear functions			<b>Room: A</b>

## Detailed program on Saturday

9 November 2019

Time	Section I Room: A	Section II Room: B	Section III Room: C	Section IV Room: D
08:45 - 09:05	<b>D. Mattiolo 33</b> Snarks with small circular flow number	<b>R. Steiner 34</b> Majority colorings of sparse digraphs	<b>M. Wilhelmi 35</b> Node-shellings of Euclidean oriented matroids	<b>U. Ahmad 36</b> Mixed fault-tolerant metric generators
09:10 - 09:30	<b>C. T. Zamfirescu 37</b> Planar hypohamiltonian oriented graphs	<b>S. D. Andres 38</b> Strong and weak perfect digraph theorems for perfect, $\alpha$ -perfect and strictly perfect digraphs	<b>S.M.C. Pagani 39</b> Power sum polynomials in a discrete tomography perspective	<b>M. A. Deppert 40</b> Near-linear approximation algorithms for scheduling problems with batch setup times
09:35 - 09:55	<b>G. Mazzuoccolo 41</b> Reduction of the Berge-Fulkerson conjecture to cyclically 5-edge-connected snarks	<b>S Wiederrecht 42</b> What is a 'Directed Tree'?	<b>C. Brand 43</b> Graßmann meets Macaulay: apolarity for catalecticants	<b>A. Lassota 44</b> Near-linear time algorithm for $n$ -fold ILPs via color coding
10:00 - 10:20	<b>R. Škrekovski 45</b> Some results and problems on unique-maximum colorings of plane graphs	<b>M. A. Yetim 46</b> Vertex labeling of graphs with interval representations	<b>A. Umar 47</b> Some combinatorial results for the partial transformation monoid	
10:20 - 10:50	<i>Coffee break</i>			

## Detailed program on Saturday

9 November 2019

Time	Section I Room: A	Section II Room: B	Section III Room: C	Section IV Room: D
10:50 - 11:10	<b>E. Máčajová</b> 49 Lower bound on the length of a cycle cover of a cubic graph	<b>T. Böhme</b> 50 Separators in geometric graphs	<b>A. A. Polujan</b> 51 Design-theoretic aspects of vectorial bent functions	<b>M. Scheucher</b> 52 Using SAT solvers in combinatorics and geometry
11:15 - 11:35	<b>G. Rinaldi</b> 53 Regular 1-factorizations of complete graphs and decompositions into pairwise isomorphic rainbow spanning trees	<b>A.R. Davtyan</b> 54 On the deficiency of complete multipartite graphs	<b>K. Tabak</b> 55 Some incidence structures within $q$ -analogs	<b>T. Fluschnik</b> 56 Polynomial-time preprocessing for weighted problems beyond additive goal functions
11:40 - 12:00	<b>S.-S. Kao</b> 57 Decompose a graph into two disjoint cycles	<b>A.H. Gharibyan</b> 58 On locally-balanced $k$ -partitions of graphs	<b>C. Kaspers</b> 59 A lower bound on the number of CCZ-inequivalent APN functions	<b>A. Skopalik</b> 60 Simple, distributed, and powerful - improving local search for distributed resource allocation and equilibrium computation
12:05 - 12:25	<b>A.A.G. Ngurah</b> 61 On super edge-magic deficiency of graphs	<b>K. Heuer</b> 62 Characterising $k$ -connected sets in infinite graphs	<b>I. Althöfer</b> 63 The early Lothar Collatz and his $3n + 1$ problem	<b>M. Schubert</b> 64 Decompositions of flows on signed graphs without long barbells
12:25 - 13:25	<i>Lunch</i>			
13:25 - 14:20	<b>Miguel Angel Fiol</b> Spectra and eigenspaces of arbitrary lifts of graphs			<b>Room: A</b>
14:20 - 14:40	<i>Coffee break</i>			
14:40 - 15:35	<b>Marco Buratti</b> A feast of combinatorial designs			<b>Room: A</b>
15:35 - 15:40	<i>Farewell</i>			