

12th Cologne-Twente Workshop on Graphs and Combinatorial Optimization

University of Twente, Enschede

May 21–23, 2013

General Information

From/To the Campus

From Railway Station Hengelo. Take either bus 15 to Universiteit or bus 9 to Enschede (buses 17, 18, and 19 also pass the University).

From Railway Station Enschede. Take either bus 1 to Universiteit or bus 9 to Hengelo.

From Railway Station Enschede Drienerlo. Take bus 1 to Universiteit or walk for about 15 minutes.

To Enschede city centre and back. Take bus 1 to Wesselerbrink and get off at the railway station. Last bus back to the university is at 23:50.

Locations

Sessions. All technical sessions take place in the Vrijhof (building 47 on the campus map) in the lecture halls *Amphitheater* and *Audiozaal*.

Conference Dinner. The conference dinner takes place on Wednesday, May 22, 2013, 18:00 in Boerderij Bosch (building 62 on the campus map).

Internet

You can use “eduroam” to connect to the internet. If you have internet access in your hotel on the campus and have obtained an account for that purpose, you can use the “UT Guest” network. If neither of these options works, you can use the computer in front of the lecture halls.

Proceedings

A PDF version of the proceedings is available at www.math.utwente.nl/~ctw/CTW2013Proceedings.pdf.

Program

Tuesday – May 21, 2013

10:00 – 10:50 coffee

10:50 – 11:00	opening (Amphitheater)
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	Amphitheater, chair: Johann Hurink	Audiozaal, chair: Rainer Schrader
11:00 – 11:30	Elias Dahlhaus Linear and almost linear time cases for minimal elimination orderings	Monique Laurent, Zhao Sun Handelman's hierarchy for the maximum stable set problem
11:30 – 12:00	Eglantine Camby, Oliver Schaudt Connected dominating set in graphs without long paths and cycles	Stefano Coniglio Bound-optimal cutting planes
12:00 – 12:30	Ismael González Yero, Amaurys Rondón Aguilar The double projection method for some domination related parameters in Cartesian product graphs	Thatchaphol Saranurak Finding the colors of the secret in Mastermind

12:30 – 14:00 lunch

	Amphitheater, chair: Ruben Hoeksma	Audiozaal, chair: Hajo Broersma
14:00 – 14:30	Ekrem Duman, Ahmet Altun Routing ATM loading vehicles	Azumi Igarashi, Yoshitsugu Yamamoto Computational complexity of the average covering tree value
14:30 – 15:00	Djamal Rebaine, Alain Quilliot Approximation results for the linear ordering problem on interval graphs	Haiko Müller, Sam Wilson Characterising subclasses of perfect graphs with respect to partial orders related to edge contraction
15:00 – 15:30	Ulrich Faigle, Alexander Schönhuth Observation and evolution of finite-dimensional Markov systems	Xavier Molinero, Fabián Riquelme, Maria Serna Star-shaped mediation in influence games

15:30 – 16:00 coffee

	Amphitheater, chair: Walter Kern	Audiozaal, chair: Giulia Galbiati
16:00 – 16:30	Ruben Hoeksma, Marc Uetz Two-dimensional optimal mechanism design for a single machine scheduling problem	Simone Dantas, Celina M. H. de Figueiredo, Giuseppe Mazzuocolo, Myriam Preissmann, Vinícius Dos Santos, Diana Sasaki On total coloring and equitable total coloring of cubic graphs with large girth
16:30 – 17:00	Philipp von Falkenhausen, Tobias Harks Optimal cost sharing for capacitated facility location games	Herbert Coelho, Luerbio Faria, Sylvain Gravier, Sulamita Klein An oriented 8-coloring for acyclic oriented graphs with maximum degree 3
17:00 – 17:30	Imran Khaliq, Gulshad Imran Constructing strategies in subclasses of McNaughton games	Márcia R. Cerioli, Daniel Posner Total $L(2,1)$ -coloring of graphs

Wednesday – May 22, 2013

8:30 – 9:00 coffee

	Amphitheater, chair: Paul Bonsma	Audiozaal, chair: Walter Kern
9:00 – 9:30	Maciej Liśkiewicz, Martin R. Schuster A new upper bound for the Traveling Salesman Problem in Cubic Graphs	Christoph Buchheim, Laura Klein The spanning tree problem with one quadratic term
9:30 – 10:00	Ueverton Souza, Fabio Protti, Maise Dantas Da Silva Parameterized and/or graph solutions	Eckhard Steffen 1-factors and circuits of cubic graphs
10:00 – 10:30	Valentin Garnero, Ignasi Sau, Dimitrios Thilikos A linear kernel for planar red/blue dominating set	Jean-François Couturier, Mathieu Liedloff A tight bound on the number of minimal dominating sets in split graphs

10:30 – 11:00 coffee

	Amphitheater, chair: Gerhard Post	Audiozaal, chair: Ulrich Faigle
11:00 – 11:30	Olivier Hudry Application of the descent with mutation (DWM) metaheuristic to the computation of a median equivalence relation	Mirjam Friesen, Dirk Oliver Theis Fooling-sets and rank in nonzero characteristic
11:30 – 12:00	Damián Bakarcic, Gabriela Di Piazza, Isabel Mendez-Diaz, Paula Zabala An IP based heuristic algorithm for the vehicle and crew scheduling pick-up and delivery problem with time windows	Yonah Cherniavsky, Avraham Goldstein, Vadim Levit Balanced Abelian group value labelings on directed graphs
12:00 – 12:30		Danilo Artigas, Simone Dantas, Mitre C. Dourado, Jayme L. Szwarcfiter Geodesic sets and periphery

12:30 – 14:00 lunch

	Amphitheater, chair: Bodo Manthey	Audiozaal, chair: Hajo Broersma
14:00 – 14:30	Michael Etscheid Performance guarantees for scheduling algorithms under perturbed machine speeds	Andrea Munaro The VC-dimension of graphs with respect to k -connected subgraphs
14:30 – 15:00	Tobias Brunsch, Kamiel Cornelissen, Bodo Manthey, Heiko Röglin Smoothed analysis of the successive shortest path algorithm	Fernanda Couto, Luerbio Faria, Sulamita Klein, Fabio Protti, Loana Nogueira On specifying boundary conditions for the graph sandwich problem
15:00 – 15:30	Radu Curticapean, Marvin Künnemann A quantization framework for smoothed analysis on Euclidean optimization problems	Kaio Karam, Diana Sasaki Semi blowup and blowup snarks and Berge-Fulkerson Conjecture

15:30 – 16:00 coffee

	Special Session in Memoriam of Francesco Maffioli Amphitheater, chair: Giovanni Righini	
16:00 – 16:30	Lara Turner, Matthias Ehrgott, Horst W. Hamacher On the generality of the greedy algorithm for solving matroid problems	
16:30 – 17:00	Giulia Galbiati, Stefano Gualandi Coloring of paths into forests	
17:00 – 17:30	Giovanni Righini, Angel Felipe Ortega, Maria Teresa Ortuno Sanchez, Gregorio Tirado Dominguez Exact and heuristic algorithms for green vehicle routing problems	

18:00 – conference dinner – location: Boederij Bosch (building 62 on campus map)

Thursday – May 23, 2013

8:30 – 9:00 coffee

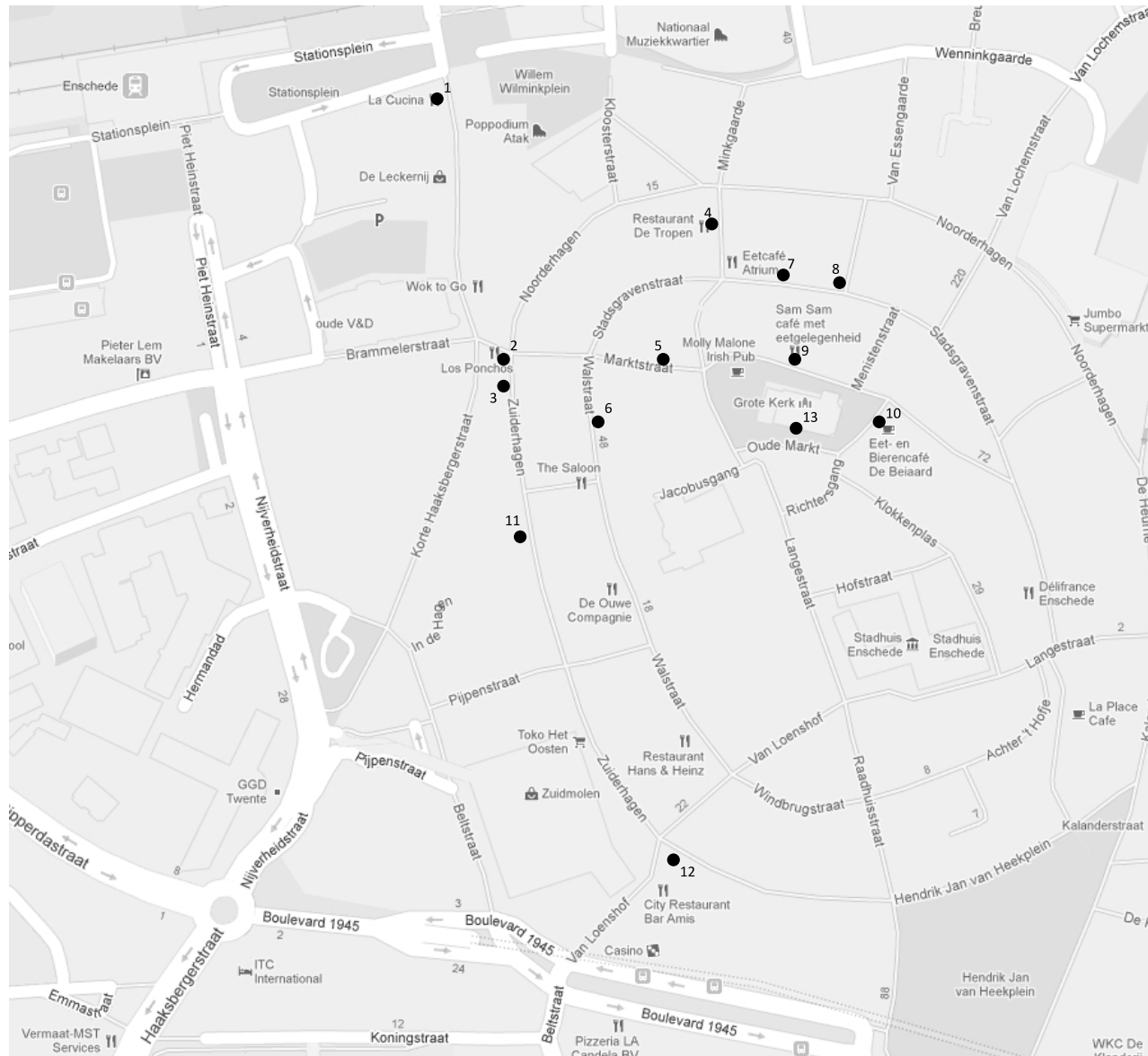
	Amphitheater, chair: Kamiel Cornelissen	Audiozaal, chair: Stefan Pickl
9:00 – 9:30	Rameshwar Pratap, Sourav Chakraborty, Akshay D. Kamath Testing uniformity of stationary distributions	Stefan Pickl, Dimitrii Lozovanu Optimal paths and networks with rated transition time costs
9:30 – 10:00	Jan Manuch, Murray Patterson, Roland Wittler, Cedric Chauve, Eric Tan-nier Linearization of ancestral multichromosomal genomes	Nair Abreu, Maria Freitas, Renata Del-Vecchio Simultaneously integral graphs on three associated matrices
10:00 – 10:30		Sven de Vries Graph products for faster separation of 1-wheel inequalities

10:30 – 11:00 coffee

	Amphitheater, chair: Johann Hurink	Audiozaal, chair: Sven de Vries
11:00 – 11:30	Karl Bringmann, Benjamin Doerr, Adrian Neumann, Jakub Sliacan Online checkpointing with improved worst-case guarantees	Sebastiaan Joosten, Hans Zantema Relaxation of 3-partition instances
11:30 – 12:00	Christina Büsing, Fabio D’Andreagiovanni, Annie Raymond Robust optimization under multiband uncertainty	Isabel Mendez-Diaz, Federico Pousa, Paula Zabala A branch-and-cut algorithm for the angular TSP
12:00 – 12:30	Roland Kaschek, Alexander Krump-holz A note on an extension of the Collatz function	Philipp Klodt, Anke van Zuylen Toward a precise integrality gap for triangle-free 2-matchings

12:30 – 14:00 lunch

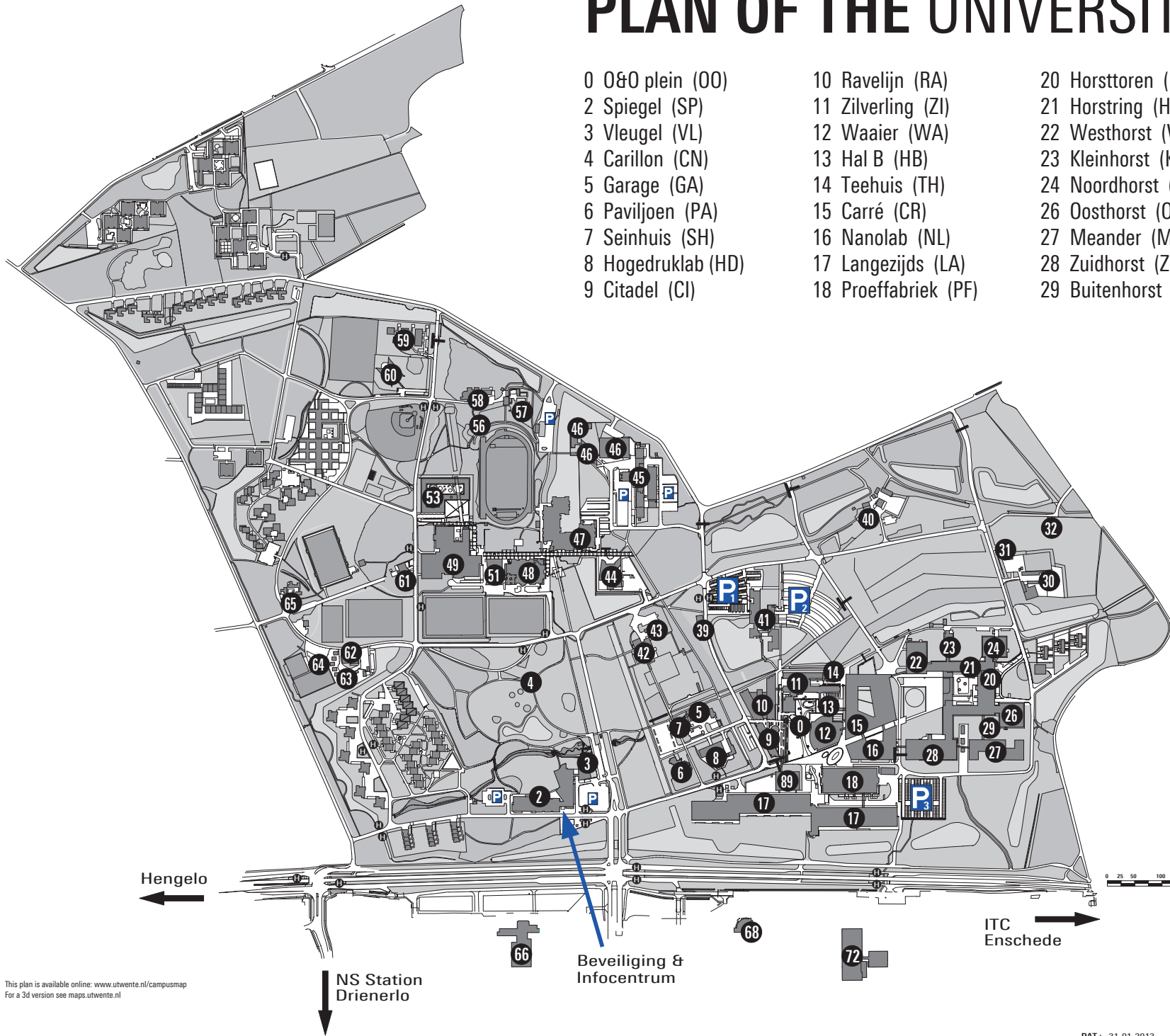
City Map and Restaurants



Many restaurants have a cheap daily dish (daghap)

1. La Cucina (upstairs), Italian, higher priced, high quality food
Forum (downstairs), Italian, regularly priced, kitchen closes at 20:00
2. Los Ponchos, Mexican, regularly priced
3. Olympic, Greek, regularly priced (daghap)
4. Restaurant de Tropen, higher priced
5. Steakhouse Goody's, American steakhouse, regularly priced, for carnivores
6. Sirtaki, Greek, regularly priced
7. Eetcafé Atrium, regularly priced (daghap)
8. Big Belly's Tavern, Irish, regularly priced [closed on Tuesday]
9. SamSam, regularly priced (daghap)
10. De Beiaard, pub specialized in beer, regularly priced, has "Beer of the month dish" but also à la carte
11. Down Town, regularly priced (daghap)
12. City restaurant bar Amis, higher priced
13. Many more at and around de Oude Markt

PLAN OF THE UNIVERSITY OF TWENTE



0 O&O plein (OO)
2 Spiegel (SP)
3 Vleugel (VL)
4 Carillon (CN)
5 Garage (GA)
6 Paviljoen (PA)
7 Seinhuis (SH)
8 Hogedruklab (HD)
9 Citadel (CI)

10 Ravelijn (RA)
11 Zilverling (ZI)
12 Waaier (WA)
13 Hal B (HB)
14 Teehuis (TH)
15 Carré (CR)
16 Nanolab (NL)
17 Langezijds (LA)
18 Proeffabriek (PF)

20 Horsttoren (HT)
21 Horstring (HR)
22 Westhorst (WH)
23 Kleinhorst (KH)
24 Noordhorst (NH)
26 Oosthorst (OH)
27 Meander (ME)
28 Zuidhorst (ZH)
29 Buitenhorst (BH)

30 Keet (KT)
31 Windpark (WP)
32 BMC (BI)
39 Chalet (CT)
40 Erve Holzik (ER)
41 Cubicus (CU)
42 Faculty Club (FC)
43 Schuur (SR)
44 Drienerburgh (DR)
45 Hogekamp (HO)
46 High Tech Factory (HTF)
47 Vrijhof (VR)
48 Bastille (BA)
49 Sportcentrum (SC)
51 Winkelcentrum/Sky (SK)
53 Box (BO)
56 Openluchttheater (OUT)
57 Zwembad (ZW)
58 Sleutel (SL)
59 Mondriaan (MO)
60 Vlinder (VI)
61 Linde (LI)
62 Boerderij Bosch (BB) Stall (ST)
63 Blokhutten (BL)
64 Tennispark (TP)
65 Logica (LO)
66 BTC
68 KPMG Gebouw (KP)
72 Corridor (CO)
89 Gebouw A (AA)

Hengelo

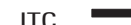


NS Station
Drienerlo



Beveiliging &
Infocentrum

ITC
Enschede



0 25 50 100 150 200 250 m



- Bushalte
- Parkeerplaats
- Slagboom
- Afsloten weg