





# Welcome to China Theory Week 2011

On behalf of the organizing committee it is our pleasure to welcome all participants to the China Theory Week 2011. We wish you an enjoyable and productive stay in Aarhus.

Peter Bro Miltersen & Amy Wang







## **China Theory Week 2011**

#### **Practical information**

Conference Location

All talks, <u>with exception of talks held on Wednesday</u>, will take place in 'Lille Auditorium' in Incuba Science Park, Aarhus University. Talks on Wednesday will be held in the 'Store Auditorium', also Incuba Science Park.

Incuba Science Park is located in the Northern part of Aarhus in the 'IT City', Åbogade 15, 8200 Aarhus N. The Department of Computer Science is

on the opposite site of the road.

**Registration** All participants need to register Monday, October 10 from 8.30. The

registration desk will be located outside the workshop auditorium below

ground (Level 0).

**Coffee Breaks** All coffee breaks will be served outside the workshop auditorium.

**Lunch** Lunch is not provided. There is a canteen in Incuba Science Park, and the

mall 'Storcenter Nord' with several cafes and a grocery store is located just

across the street from the workshop venue.

Workshop Dinner The official workshop dinner will take place Wednesday, October 12 at

18:30 at Aros Museum of Art, Art Restaurant, Aros Allé 2, 8000 Aarhus C. A

winter buffet will be served:

Codd with beetroots and mustard

Smoked pork tenderloin w/ med crème of herbes and cabbage

Beer sausages w/ Swedish mustard and celery

Shank of veel w/ onion and cress

Fillet of beef w/ baked root crops tossed with onion shells A selection of Danish cheeses w/ salted nuts preserved berries

Chokolate w/ creme

If you are a vegetarian please inform Dorthe dortheas@cs.au.dk







Tuesday & Wednesday

**Dinners** 

Two informal dinners will take place in the coffee lounge, Department of Computer Science, Åbogade 34, 8200 Aarhus N. Tuesday there will be pizza,

and Wednesday rice and a stew.

Wireless Access You will have access to the wireless networks named "AU-Gadget". All

participants will have a unique User Name and Password

(printed on the back of your name badge).

Sightseeing

Please check the brochures in your workshop bag for handy tourist

information about Aarhus City.



Monday October 10, 2011			
TIME	ACTIVITIES		VENUE
08:30-09:10	Registration		
09:10-09:30	Opening remarks by Amy Wang and Peter Bro Miltersen		
00 20 40 20	Keynote talk 1	Ryan Williams - Stanford University	
09:30-10:30	<u>Chair:</u> Amy Wang	Algorithms for Circuits and Circuits for Algorithms	Lille AUD - IT-Huset
10:30-11:00		Coffee break	
11:00-12:00	<u>Chair:</u> Dominik Scheder	Ilya Volkovich - Technion  Black-Box Identity Testing Of Depth-4 Multilinear Circuits	Lille AUD - IT-Huset
		Ramprasad Saptharishi - IIT, Kanpur  Jacobian hits all circuits	
12:00-14:00		Lunch Break - Lunch is on your own	
12.00 14.00	Chair:	Bangsheng Tang - Tsinghua Univeristy	
14:00-15:00	Dominik	Width-parameterized SAT: Time-Space Tradeoffs	Lille AUD - IT-Huset
		Timon Hertli - ETH Zurich	
		3-SAT Faster and Simpler - Unique-SAT Bounds for PPSZ Hold in General	
15:00-15:30	Coffee break		
	<u>Chair:</u>	Yuan Zhou - CMU	
	Qin Zhang	Approximation Algorithms and Hardness of the k-Route Cut Problem	
15:30-17:00		Yuichi Yoshida - Kyoto University	Lille AUD - IT-Huset
		Testing Juntas of Symmetric Functions	
		Elisa Celis - University of Washington	
		Balls and Bins: Smaller Hash Families and Faster Evaluation	



		Tuesday October 11, 2011	
TIME		ACTIVITIES	VENUE
	Keynote talk 2	Mikkel Thorup - University of Copenhagen	
09:00-10:00	<u>Chair:</u> Peter Bro Miltersen	The Power of Tabulation Hashing	Lille AUD - IT-Huset
10:00-10:30		Group Photo + Coffee break	
	<u>Chair:</u> Joshua Brody	Bernhard Haeupler - MIT  Analyzing Network Coding Gossip Made Easy	
10:30-12:00		Mahmoud Fouz - Saarland University  Social Networks Spread Rumors in Sublogarithmic Time  Tiancheng Lou - Tsinghua University	Lille AUD - IT-Huset
12.00.14.00		Who Will Follow You Back? Reciprocal Relationship Prediction	
12:00-14:00		Lunch Break - Lunch is on your own	
14:00-15:00	<u>Chair:</u> Jie Zhang	George Pierrakos - Berkely On Optimal Single-Item Auctions	Lille AUD - IT-Huset
		Simina Branzei - Aarhus University  Matching games with compact externalities	
15:00-15:30		Coffee Break	
15:30-16:30	<u>Chair:</u> Tomas Toft	<b>Liwen Xu - Tsinghua University</b> Major Coefficients Recovery: a Compressed Scheme for Data Gathering in Wireless Sensor Network	Lille AUD - IT-Huset
		Shayan Oveis Gharan - Stanford University A Randomized Rounding Approach to the Traveling Salesman Problem	
18:00-????	<u>Chair:</u> Elad Verbin	Pizza and beer session	Coffee room



Wednesday October 12, 2011			
TIME		ACTIVITIES	VENUE
	Keynote Talk 3	Thore Husfeldt	
09:30-10:30	<u>Chair:</u> Peter Bro Miltersen	IT University of Copenhagen and Lund University  Exponential time algorithms	Store Aud - IT-Huset
10:30-11:00		Coffee break	
11:00-12:00	<u>Chair:</u> Wei Yu	Roy Schwartz - Technion A Unified Continuous Greedy Algorithm for Submodular Maximization	Store Aud - IT-Huset
		Pushkar Tripathi - Georgia Tech  Matching with Commitments	
12:00-14:00		Lunch Break - Lunch is on your own	
14:00-17:00		<b>OUTING:</b> Visit to Den Gamle By (The Old Town)	Viborgvej 2 Aarhus C
18:30-????		Official Dinner at AROS	Aros Allé 2 Aarhus C



		Thursday October 13, 2011	
TIME		ACTIVITIES	VENUE
	Keynote Talk 4	Yuval Ishai - Technion	
09:30-10:30	<u>Chair:</u> Ivan Damgård	The Complexity of Cryptography	Lille AUD - IT-Huset
10:30-11:00		Coffee break	
11:00-12:00	Chair: Sebastian Faust	Allison Lewko - Univeristy of Texas at Austin  The Contest Between Simplicity and  Efficiency in Asynchronous Byzantine Agreement	Lille AUD - IT-Huset
11.00 12.00		Abhishek Jain - UCLA  Leakage-Resilient Protocols	Line AOD - 11-11uset
12:00-14:00		Lunch Break - Lunch is on your own	
44.00.45.30	<u>Chair:</u> Carmit Hazay	Sigurd Melgaard - Aarhus University  Oblivious RAM in the standard model	
14:00-15:30		Jon Ullman - Havard University Privately Releasing Conjunctions and the Statistical Query Barrier  Jakob Funder - Aarhus University	Lille AUD - IT-Huset
		Superposition Attacks on Cryptographic Protocols	
15:30-16:00		Coffee break	
16:00-17:00	<u>Chair:</u> Tomas Toft	Thomas D. Hansen - Aarhus University  Subexponential lower bounds for randomized pivoting rules for the simplex algorithm	Lille AUD - IT-Huset
		Jop Briet - CWI  Grothendieck Inequalities for Semidefinite Programs with Rank Constraint	
18:00-????	<u>Chair:</u> Elad Verbin	Pizza and beer session	Coffee room



Friday October 14, 2011			
TIME	ACTIVITIES VENUE		
	Keynote talk 5	Harry Buhrman - CWI	
09:00-10:00	<u>Chair</u> Christophe Tartary	Position-based cryptography	Lille AUD - IT-Huset
10:00-10:30	Coffee break		
	<u>Chair:</u> Elias Tsigaridas	Yuval Filmus - University of Toronto  A combinatorial algorithm for maximum coverage over a matroid.	
10:30-12:00		Daniel Dadush - Georgia Tech Enumerative Lattice Algorithms in any Norm via M-ellipsoid Coverings	Lille AUD - IT-Huset
		Casper Kejlberg-Rasmussen - Aarhus University  Cache-Oblivious Implicit Predecessor Dictionaries  with the Working-Set Property	
12:00-12:15	Peter Bro Miltersen	Closing remarks	







### **Travel information**

### Travel from Airports to Aarhus

#### Aarhus Airport:

There is an Aarhus City airport bus meeting every flight. The trip takes 50 minutes. The bus terminal is in front of Aarhus central train station, but upon request the bus stops at the University and at the Radisson Hotel.

#### Billund airport:

There are regular busses from the airport to Aarhus. The trip takes 1 ½ hour. The bus terminal is by the main entrance to the Radisson SAS Hotel, which is close to the central train station. To see the bus schedule for a specific date, please follow this link.

#### Copenhagen Airport:

Trains for Aarhus central station departs from below the airport. The trip takes 3 ½ hour and costs 347 DKK for a one way ticket PLUS 30 DKK to reserve a seat, which we strongly encourage you to buy. Some trains involve a change in Copenhagen central train terminal. You can find a schedule in <a href="http://www.dsb.dk/">http://www.dsb.dk/</a> (Danish only, but pretty self-explanatory). In the trains there are power plugs (bring a European adapter). You can buy cheap internet connection for 30 DKK; the code for the Internet can be bought from the person selling food on the train.

**NOTE**: Taxis are expensive in Denmark and we DO NOT recommend that you take a taxi from the airports to Aarhus.







#### **Travel within Aarhus**

#### Arrival:

The workshop hotels can be reached on foot from the train station/airport bus stop. If it rains, or you have a lot of luggage, you might consider taking a cab if you are going to the CABINN hotel or stay at a university guesthouse.

**From hotels to workshop site**: The enclosed map gives an overview of the different locations related to the workshop.

#### Taxi:

Taxi from downtown Aarhus to the conference site will cost around 150 DKK ( $\sim$  30 \$ or  $\sim$ 20EUR).

Aarhus Taxa 89 48 48 48 Taxamotor Århus 70 13 31 33 Århus Mini Taxi 86 16 47 00

#### Bus:

Bus 2A will get you from Aarhus downtown to the conference. On the bus display it should say 'Skejby Sygehusj' when going from downtown to the conference site, and 'Holme' when going from the conference to downtown. The stop for the conference is called "Åbogade", and the bus departs several times per hour from downtown near the train station.

The bus fare is 20 DKK. You buy the ticket in a machine (pay with VISA/Mastercard or have coins ready) in the bus and choose the option for an adult two-zone ticket. Tickets are valid two hours onward from the time of purchase. You can also buy multi ride tickets at any downtown kiosk and at the train station. Note that in Aarhus the door in the front of the bus is only used as an exit door; you enter through the back door in some busses and middle door in other buses.

#### Bike:

<u>Aarhus city bikes</u> are available free of charge at various locations in the downtown area. You simply insert a 20 DKK coin to get the bike. The coin is released when you return the bike (or you can also simply leave the bike and some kid will in all likelihood return it and collect the 20 DKK).







### **Opening Hours**

#### Chemists:

Open daily from 9 am - 5.30 pm Fridays from 9 am - 6 pm Saturdays 9.30 am - 1 pm Open 24 hours at the centre of Århus: Løve Apoteket, Store Torv 5, Phone: 86 12 00 22

#### Banks:

All banks are open Monday, Tuesday Wednesday and Friday from 10 am - 4 pm, Thursdays from 10 am - 5.30 pm. Closed Saturday and Sunday.

#### Shops:

Open Monday – Thursday from 10 am - 5.30 pm, Friday from 10 am - 7 pm, Saturday ordinarily 10 am - 2/4 pm.

The first and last Saturday of the month extended opening hours.

Sundays open on selected Sundays. Supermarket offering all stables in the Central Station hall Monday - Friday 7 am - 12 pm hours, weekends 8 am - 12 pm.

#### Supermarkets:

Monday – Friday 9.30/10.00 am – 7.00/8.00 pm Saturday 9.00/9.30 am – 4.00/5.00 pm

#### Post offices:

The post office next to the railway station is open Monday – Friday 9.30 am - 6 pm, Saturday 10 am - 1 pm.

Phone: 80 20 70 30

### **Health and Safety**

#### Police and lost property:

Should you be so unfortunate to be exposed to theft or robbery, you should contact the police immediately.

Århus politistation Ridderstræde 1 Phone: 87 31 14 48 24 hours a day





#### Emergency – accident or illness (police, ambulance, fire): Dial 112

(free of charge from public telephones).

#### Medical help:

If you need to see a doctor, you should ask the Conference help desk to arrange it. Doctors' opening hours are between 8 am-4 pm.

#### Emergency medical help:

In case of an emergency outside the doctor's opening hours.

Phone 70 11 31 31 from 4 pm - 8 am, and weekends.

#### Hospitals/Emergency wards:

If you are injured and need sudden and urgent medical care, you can go to the emergency ward (Skadestuen) at the nearest hospital. You have to call them in advance before going to the emergency ward.

Phone: 87 31 50 50 Open: 24 hours

Århus Universitetshospital, Århus Sygehus

Nørrebrogade 44 8000 Aarhus C

#### Emergency Dentist help:

Phone 40 51 51 62. Only between 8 pm - 9 pm. On Sundays and holidays, also 11 am - 2 pm.

### Coffee bars and pubs

#### Coffee:

Emmerys (Guldsmedgade 24)

Deli and bakery. Eat in as well. Opens 7 am.

#### Altura Kaffe (Graven 22)

Best coffee in town. Own coffee roastery. Two houses down from Le Coq. Open 10 am - 6 pm.

#### <u>Sigfreds kaffebar (Ryesgade 3, in the Vangsgaard's bookshop)</u>

Homely Café in the lower part of the bookshop. Open 10 am - 5.30 pm, Friday 10 am - 7 pm, Saturday 10 am - 4 pm.







#### Bars:

If you would like to go out for a drink, here are some local cafés/restaurants and pubs that we recommend.

#### <u>Løve's Bog- og VinCafé (Nørregade 32)</u>

Book and wine café. Open 9 am - 6 pm, Friday 9 am - 12 pm.

#### FairBar (Nørre Allé 66)

Inexpensive café. Free music many days, large Danish beer selection with a guarantee of tasting the world-famous Danish beer "Mikkeller". Open Monday - Thursday 3 pm - 11 pm, Friday - Saturday 1 pm - 2 am, Sunday 1 pm - 6 pm.

#### Ris Ras Filliongongong (Mejlgade 24)

Pub with peculiar decorations, water pipe and a large beer collection. Does not serve food, however, you are welcome to bring your own sandwich. Open 11 am - 12 am.

#### Billabong bar (Skolegade 26)

Australian sports pub. Plays rock music. Open 2 pm - 3 am, Friday 12 pm - 3 am.

#### Café Vestergade (Vestergade 42)

Classical Danish café. Open Monday - Thursday 12 pm - 12 am, Friday - Saturday 12 pm - 2 am, Sunday 1 pm - 7 pm.

#### <u>Tir na nóg (Frederiksgade 40)</u>

The real Irish Bar in town. Open Monday - Sunday, 12 pm - 3 am.

#### <u>Lynfabrikkens bar (Vestergade 49 B)</u>

Café, shop and office hotel. A platform for creative businesses. Open approx. 9 am - 6 pm.

#### Studenterbaren (Nordre Ringgade 3)

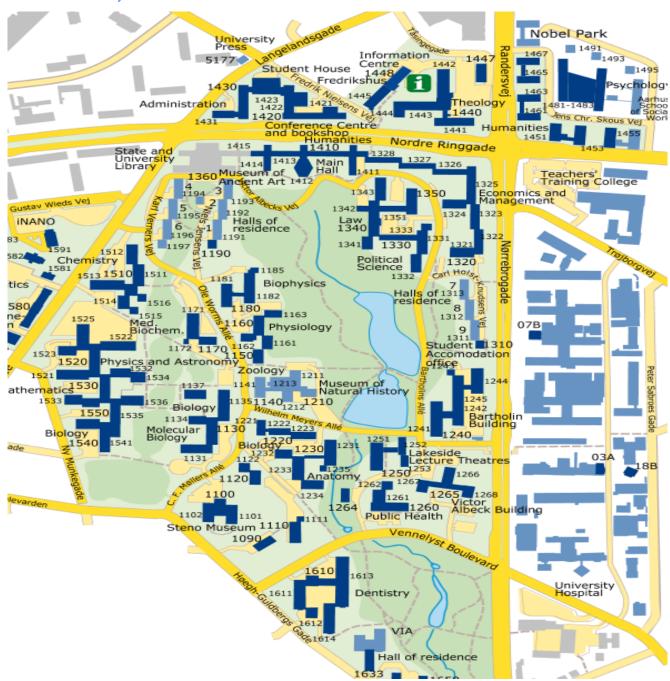
is located in the same building complex as the conference venue (though you have to use the underpass to cross the street). Excellent selection of beers. Open Monday - Thursday 12 pm - 2 am, Friday 12 pm - 3 am, Saturday 8 pm - 3 am, Sunday closed.





### **MAPS**

#### **Aarhus University**







#### IT City Katrinebjergvej

