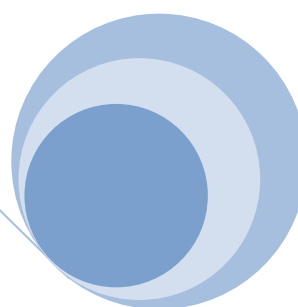
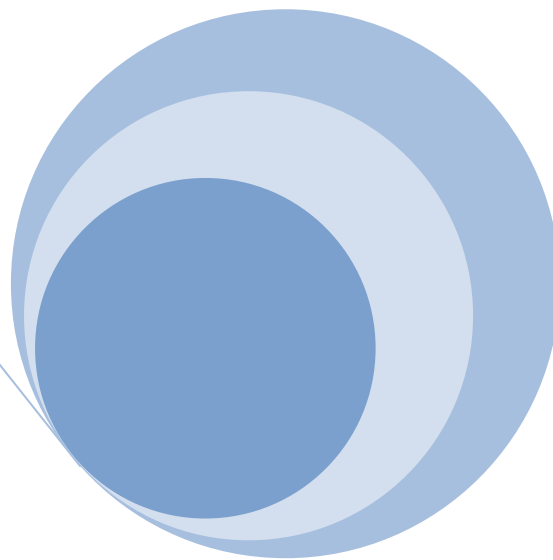




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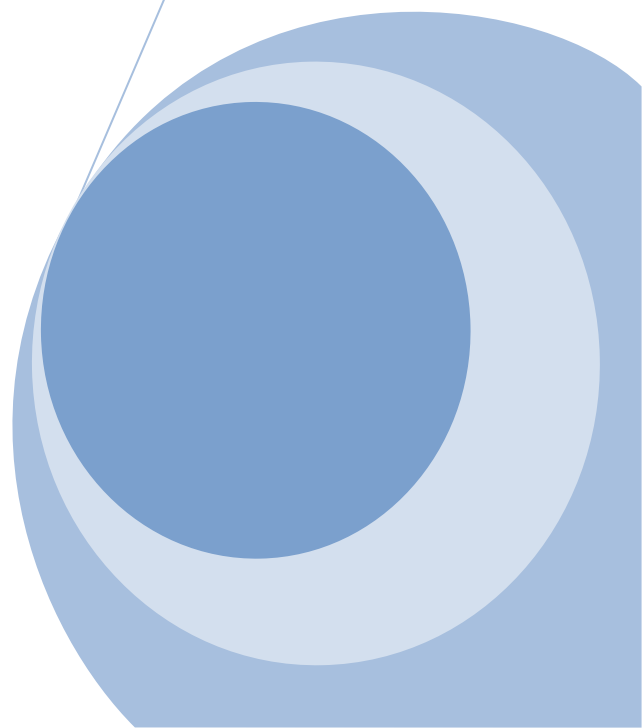


# Information Pack

Machine Learning Summer School, Cambridge

Some useful information to help you make the most out of your time at the MLSS and in Cambridge.

**August 2009**



# Welcome

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Dear MLSS Participants,

A warm welcome to Cambridge and to the Machine Learning Summer School 2009. We have two busy weeks ahead of us, and we hope that you look forward to them as much as we do. In this booklet, we have put together some information that you may find useful – on the summer school itself, as well as on whom to call or where to go for dinner and drinks.

We hope that you will enjoy your time in Cambridge. Thank you all for coming.



Zoubin Ghahramani

Carl Edward Rasmussen

Christopher Bishop

Philip Dawid

David MacKay

Peter Orbanz

Joaquin Quiñonero Candela

## < IMPORTANT INFORMATION >

### ***For Participants staying in Churchill***

- ***On the First Night (Saturday evening):*** Make sure you go to the registration desk in the entrance hall of Churchill College. The registration desk will be open from **6pm – 9pm**. If you arrive later that night, you can pick up your name badge at CMS before the first lecture on Sunday morning.
- ***On the First Day (Sunday Morning):*** Please come to CMS for the first lecture, which will start at **9:00am**, CMS Room MR2.
- ***Breakfast and Lunch:*** Self service breakfast will be available from **7:30am - 9:30am**. Lunch will be served from **12:45 - 1:30pm**. To attend breakfast and lunch, please wear your name badge (the one you received from Churchill College when you checked into your room rather than the MLSS name badge).

### ***For Local Participants***

- ***Registration:*** Please sign in at the registration desk in CMS, before the first lecture starts. Registration desk will be open **8:30am – 9am**, and during the coffee break (**10:30-11:00am**).

### ***In case you need any help...***

- If you have any questions about this summer school, please ask us at the registration desk.
- You are also able to reach one of the organizers by phone. Please call us on any urgent questions or problems, or if you do not feel well. However, we would ask you to use this phone number with discretion.

### ***Some Useful Numbers***

#### ***MLSS Organisers***

+44 (0) 781 248 2553

#### ***Venue Contact Numbers:***

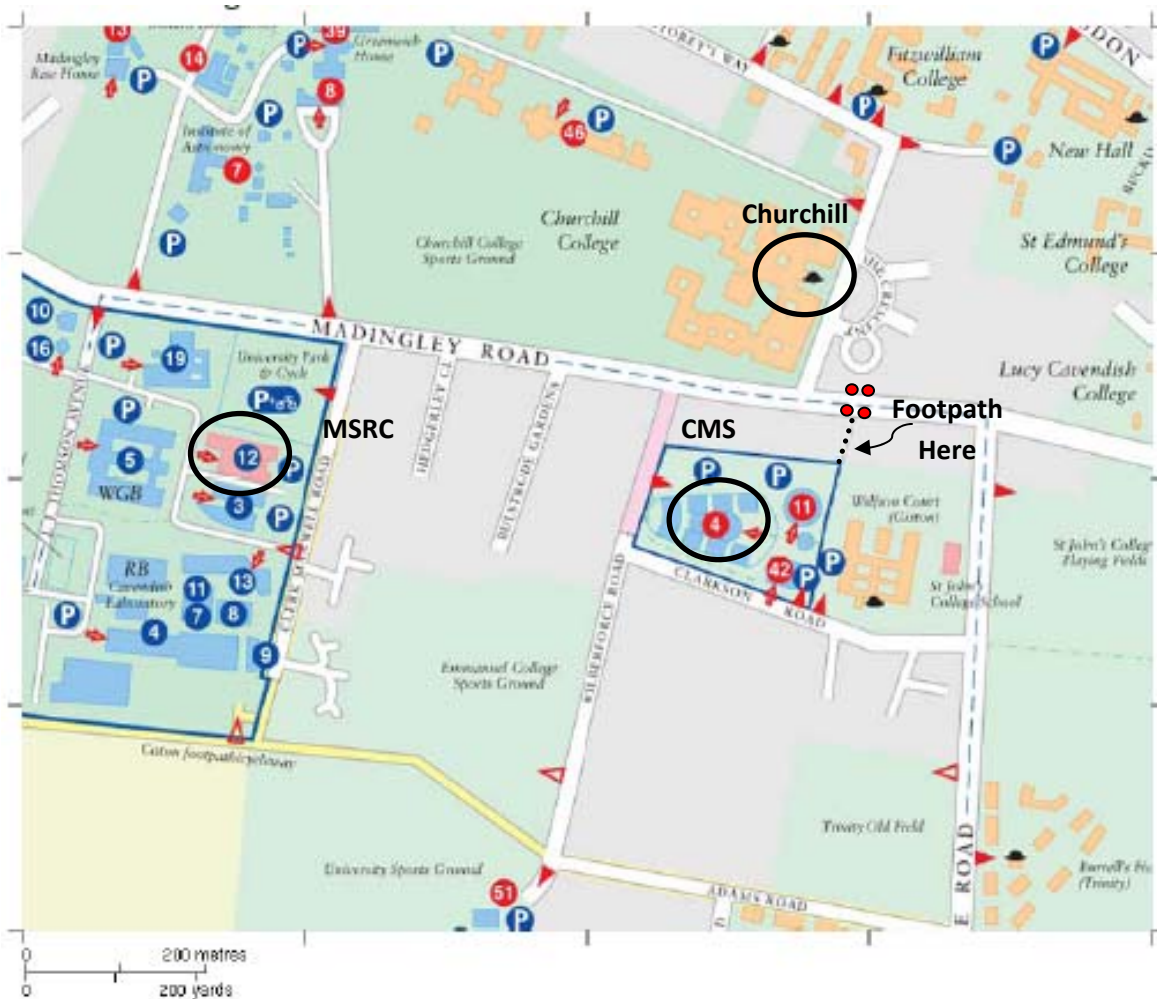
- Churchill College Porter's Lodge (open 24hrs) (01223) 336 000
- CMS Reception Desk (01223) 765 000

#### ***Other Important Numbers:***

- Emergency (for all emergencies) 999
- Police Station (01223) 358966
- Addenbrooke's Hospital (01223) 245151

## Venue Information

- Below is a map of the general West Cambridge area, including Churchill College, Centre for Mathematical Sciences (**CMS**) and Microsoft Research, Cambridge (**MSRC**).
- It is a 5 minute walk from Churchill to CMS – use the footpath (marked on the map).
- Once at any of these sites, there are many signs to help you find your way to the venues.
- The gates at CMS will be open daily from 8:30am – 5:30pm and again at 7:30pm – 9:00pm on the evenings of the two poster sessions.
- Certain practical sessions will be held in the Lecture room and Design and Project Office (DPO) at the Department of Engineering (**CUED**). The entrance of department of Engineering is on Trumpington Street.



To Cambridge City Center →

## Lecture Schedule

Date	Venue	09:00-10:30	11:00-12:30	14:00-15:30	16:00-17:30	Evening
Sun 30 Aug	CMS	<b>Bishop</b> Introduction to Bayesian Inference I	<b>Ghahramani</b> Graphical Models I	<b>Murray</b> Markov Chain Monte Carlo I	<b>Mackay</b> Information Theory I	Reception at Churchill 18:00-19:30
Mon 31 Aug	CMS	<b>Schölkopf</b> Kernel Methods I	<b>Bishop</b> Introduction to Bayesian Inference II	<b>Murray</b> Markov Chain Monte Carlo II	<b>Minka</b> Approximate Inference I	
Tue 1 Sep	CMS	<b>Blei</b> Topic Models I	<b>Mackay</b> Information Theory II	<b>Ghahramani</b> Graphical Models II	<b>Minka</b> Approximate Inference II	Banquet 19:00 (with invitation)
Wed 2 Sep	CMS	<b>Schölkopf</b> Kernel Methods II	<b>Rasmussen</b> Gaussian Processes I	PRACTICALS	FREE	
Thu 3 Sep	CMS	<b>Vandenberghe</b> Convex Optimization I	<b>Shawe-Taylor</b> Learning Theory I	<b>Blei</b> Topic Models II	<b>Blake</b> Computer Vision I	Posters 20:00- 22:00
Fri 4 Sep	MSR	<b>Vandenberghe</b> Convex Optimization II	<b>Littman</b> Reinforcement Learning I	<b>Blake</b> Computer Vision II	<b>Shawe-Taylor</b> Learning Theory II	Wine Reception 17:30
Sat 5 Sep	CMS	<b>Teh</b> Nonparametric Bayesian Models I	<b>Tenenbaum</b> Machine Learning and Cognitive Science I	<b>Rasmussen</b> Gaussian Processes II	<b>Littman</b> Reinforcement Learning II	
Sun 6 Sep		FREE	FREE	FREE	FREE	
Mon 7 Sep	CMS	<b>Hinton</b> Deep Belief Networks I	<b>Orbanz</b> Foundations of Nonparametric Bayesian Methods I	<b>Godsill</b> Particle Filters I	<b>Tenenbaum</b> Machine Learning and Cognitive Science II	Posters 20:00-22:00
Tue 8 Sep	CMS	<b>Dawid</b> Causality I	<b>Hofmann</b> Information Retrieval I	<b>Godsill</b> Particle Filters II	<b>Hofmann</b> Information Retrieval II	
Wed 9 Sep	CMS	<b>Jordan</b> Bayesian or Frequentist, Which Are You? I	<b>Orbanz</b> Foundations of Nonparametric Bayesian Methods II	<b>Dawid</b> Causality II	<b>Hinton</b> Deep Belief Networks II	College Tour 18:30 Banquet 19:45
Thu 10 Sep	CMS	<b>Teh</b> Nonparametric Bayesian Models II	<b>Jordan</b> Bayesian or Frequentist, Which Are You? II			

\*Coffee at 8:30am, 10:30am, 3:30pm. Lunch break 12:30 – 1:30pm.

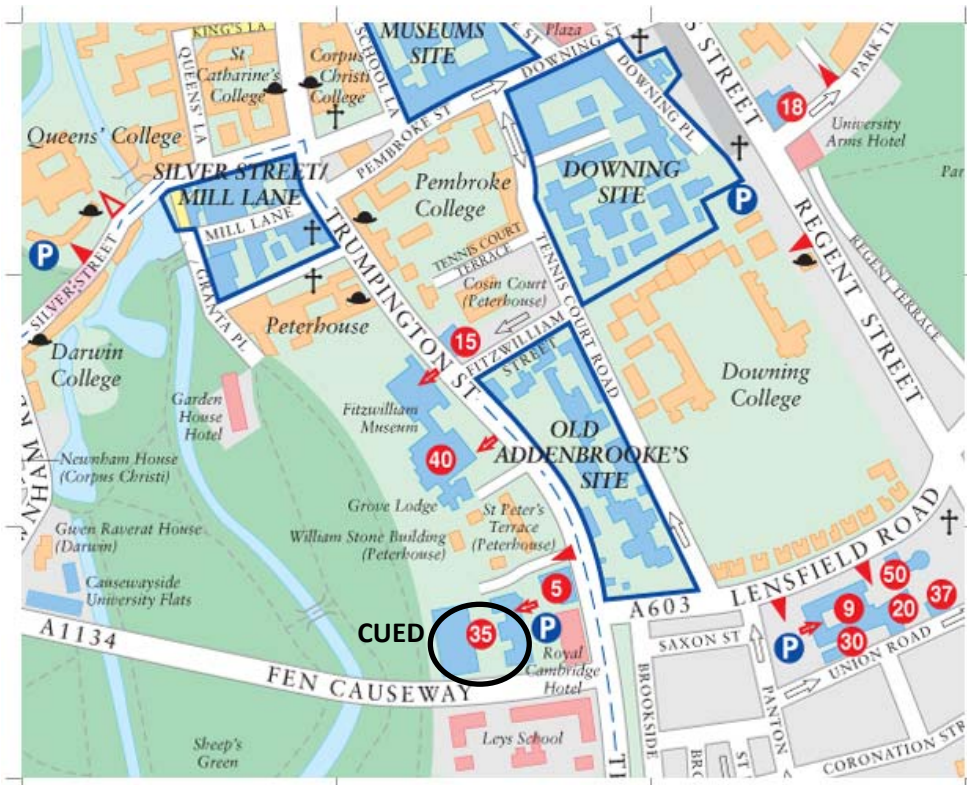
## Practical Schedule

Date	Speakers and Topics	Time	Venue
Wed 2 Sep	<b>Joaquin Quiñonero Candela &amp; Ed Snelson</b> Gaussian Processes	2:30 – 4:00pm	CUED
	<b>Iain Murray</b> Markov Chain Monte Carlo	2:00 – 3:30pm	CMS
	<b>John Winn &amp; Tom Minka</b> Probabilistic Programming	2:30 – 5:30pm	CUED
Thu 3 Sep	<b>Iain Murray</b> Markov Chain Monte Carlo	2:00 – 3:30pm	CMS
		4:00 – 5:30pm	CMS
Fri 4 Sep	<b>Joaquin Quiñonero Candela &amp; Ed Snelson</b> Gaussian Processes	2:00 – 3:30pm	CMS
		4:00 – 5:30pm	CMS
Sat 5 Sep	<b>John Winn &amp; Tom Minka</b> Probabilistic Programming	2:30 – 5:30pm	CUED
Mon 7 Sep	<b>John Winn &amp; Tom Minka</b> Probabilistic Programming	2:30 – 5:30pm	CUED

## For Practical Attendees

- **Sign in:** During the first day of lectures, we will ask you to register for each practical you are planning to attend.

A map to the department of Engineering (CUED) is below. When you get to the department, go into the main building, which is the Baker building. There are signs to guide you. We also have a volunteer to take you to the right room.





## Banquet Information

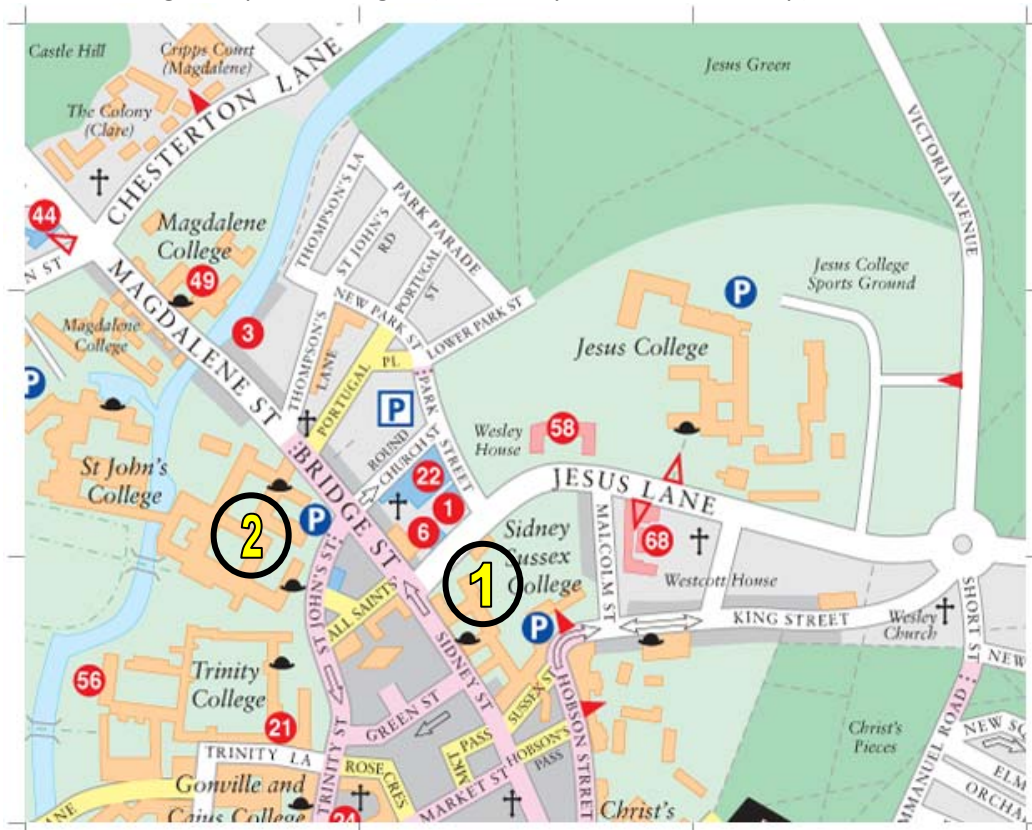
There will be two banquet dinners hosted in Cambridge colleges. The first banquet, in Sidney Sussex College, will be for non-local participants only. For the second banquet at St. John's College, all participants are invited. We hope that you will join us.

## St. John's College Tour

Before the second banquet on Wed 2<sup>nd</sup>, you can participate in a guided tour around the College. St. Jones is one of the historical constituent colleges of the University of Cambridge, and the tour will provide some insight into academic life in Cambridge, past and present.

1. **Sidney Sussex College** (Non-local participants only)
    - Date: Tuesday, 1<sup>st</sup> September
    - Time: 7pm for drinks, 7:30pm for dinner
  2. **St. John's College** (Tour of College and Dinner in Hall, All participants)
    - Date: Wednesday, 9<sup>th</sup> September
- Tour**
- Time: 6:30-7:30pm (Please be at St John's Porter's Lodge by 6:30pm)
- Dinner**
- Time: 7:45pm

The locations of Colleges where the banquets will be hosted are numbered on the map below. The entrances are through the porters lodge's (marked by the hat on the map).



## Other Activities

All participants (external and local) are also invited to the Microsoft events and the BBQ. Details are as follows.

**1. Microsoft Research Demos / Sandwich lunch**

- Date: Friday, 4th September
- Time: 12:30-2pm
- Venue: Microsoft Research

**2. Microsoft Research Wine Reception**

- Date: Friday, 4th September
- Time: 5:30pm
- Venue: Microsoft Research

**3. BBQ Lunch at Churchill College**

- Date: Monday, 7<sup>th</sup> September
- Time: 12:45pm

## Things to Bring to Cambridge

- ☒ Bring an umbrella – it may rain.
- ☒ An Ethernet cable for you to access the internet in your rooms. There will be wireless available at the lecture venues.
- ☒ Please bring your own laptop if you wish to access the internet (but is not essential for practical sessions).
- ☒ It may get cold and rainy while you are here, so a warm clothing option is advised. August temperatures range from 11°C (min) to 22°C (max).

**Also Note:**

- There is no printer available on site.
- Please keep any valuables in your possession at all times.
- Also make sure that your mobile phones are switched off/silent during all lectures and practical sessions.



## Useful Information

### **Laundry:**

- The College provides three laundry rooms at Staircase 5, 42 and 47, each equipped with card operated washing machines and tumble dryers. Entry to laundry rooms is via use of your room key. In addition on Staircase 5 there is a drying room.
- Cards for use with the washing machines and dryers can be purchased from the Porter's Lodge - £1.30 for a wash, £1.20 to use the dryer.
- Washing powder can also be bought from the Porters in a packet sufficient for one wash – 50p per packet.

### **Plugs:**

- British plugs are different from other European plugs and operate at 230V, 50Hz single-phase with 3-pin plugs.
- Make sure your equipment will work with this system and that you get the right plug- converter.



### **Cash Machines/ATMs:**

- Cash machines are dotted throughout the City Centre: Trinity Street (RBS), Market Square (Barclays, Lloyds), St Andrews Street (HSBC, Natwest). These accept most major debit/credit cards.

### **Cycling:**

- Cycling is a popular way to get around town, with the provision of cycle lanes having improved over the years, with Maddingley Road and Grange Road now quite convenient for cycling.
- You can hire a bike from a few places in town. Station cycles (at the train station) rent bikes on a weekly basis.
- However, bicycle theft is one of Cambridge's biggest industries, so if you hire a bike make sure you lock it up securely from the start!
- Note that cycle lights are obligatory when cycling at dusk or after dark, and cycle helmets are strongly recommended.

### **Post Offices:**

- The main post office is on St. Andrews Street.
- There is also a post office on Trinity Street (right across from Trinity College).

### **Taxis:**

- In general, Taxis cannot be hailed in Cambridge, and you will have to call them to come to where you are.
- There are taxi stands where you can jump into the next available taxi though. There is one right next to the Bus stop on Parkers piece, also on St. Andrew's Str.
- Panther Taxi – (01223) 715 715

### **Buses:**

- The Citi4/Uni 4 bus stops near to Churchill College.
- An all day bus ticket (Day Rider) costs £3.30. So if you use the bus, then getting a weekly bus ticket (7 days, Mega Rider) may be the better option and costs £11.50. Tickets can be bought from the bus driver. These bus tickets can be used on any of the buses (not just Citi4/Uni4) to get around town.

## Going Out Guide: Pubs and Bars

The United Kingdom is well known for its pubs. And part from getting a “pint”, you can also get **food** at most pubs. All pubs, clubs, restaurants and bars are non-smoking. As such, sociable congregations of smokers can often be found outside all of the establishments listed below. The Pubs listed below are also in order (sort of) of being closest to Churchill.

- **The Punter** (Northampton Street) does excellent food (some of the best in Cambridge), but can be expensive food. Convivial atmosphere.
- **The Castle** (Castle Hill) serves a great selection of beers from the Adnam’s brewery. Try their famous ‘Castle Burger’ – you won’t be disappointed.
- **Henry’s** (Quayside by Magdalene Bridge) is quite nice and has swanky atmosphere; good for getting food and some drinks but can be a little pricey. No English ales here.
- **The Maypole** (Park Street) is an excellent local pub with a late licence (i.e. you can buy drinks past 11pm). It also specializes in cocktails including the Red Boy, in honour of the St. John’s Rugby Team.
- **The Mitre** (Bridge Street) has a dark smoky atmosphere with a mixed clientele. The range of beers is good, but the food is not.
- **The Pickerel Inn** (Magdalene Street) is a low-ceilinged traditional pub that can get very busy, but is good and has a small outside area too.
- **The Eagle** (Bene’t Street) is a large central pub with many tourists because this is where Watson and Crick famously announced the discovery of the double-helix.
- **The Bath House** (Bene’t Street) is near the Eagle and has the longest row of beer pumps in Cambridge. Can get very crowded.
- **B Bar** (halfway down Market passage) is a large lofty bar on several floors. Sells a range of food from salads to burgers and plates of antipasti.
- **La Strada** (Trinity Street) is one of Cambridge’s trendiest bars with good food and a range of cocktails.

- **La Raza** (Rose Crescent) is a café and lunch venue during the day which becomes more of a bar in the evenings: open till midnight, often with live jazz.
- **Slug and Lettuce** (Green Street) is nice bar to sit in but the food isn't great.
- **The Anchor** (Silver Street) is a sprawling pub overlooking the river that serves good lunches and is an ideal pit-stop on a punting trip.
- **The Snug** (Lensfield Road) is close to the department of engineering. They serve good food, open till midnight.
- **The Fountain Inn** (Regent St) is open until 2am (weekdays) or 3am (weekends); the Fountain is one of the last pubs to close in the city.
- **All Bar One** (Regent Street) is part of a national chain; large and trendy and particularly busy at the weekends.
- **The Free Press** (Prospect Row) is a tiny pub with a small beer garden.
- **The Cricketers** (Melbourne Place) is another quirky pub, with pool tables.
- **The Elm Tree** (Elm Street) - nice real-ale pub with cosy atmosphere and no football. No food served here.
- **BRB and The Cow** (Corn Exchange Street) tends to have space for large groups, serves great 2 for 1 pizzas on Tuesdays and has a good range of cocktails.
- **The Fort St George** (Midsummer Common) is a great summertime pub where you can eat by the river away from the crowds; recently refurbished.
- **The Granta** (Newnham Road) is another river pub where you can moor punts.
- **Cambridge Blue** (Gwydir Street) - excellent ales and food, usually quite busy. Has a nice garden at the rear.
- **Live and Let Live** (Mawson Road) has a great selection of the finest English real-ales; very nice atmosphere. Popular with Cambridge locals.

## Going Out Guide: Restaurants

- **Pizza Express** (Jesus Lane) is the nicest of branches of this chain in Cambridge with an oak-panelled dining room. One of the best pizzas you'll get in the £6-£8 range.
- **Browns** (Trumpington Street) is a renowned Oxbridge venue which has a wide range of British food, but can be pricey. Right across from the Fitzwilliam Museum and close to the Department of Engineering.
- **Galleria** (Bridge Street) is worth a visit for the views over the river, but this privilege is reflected in the prices. Lunchtime deals available in the £10 range for two courses.
- **Varsity** (Regent Street) serves Greek Cypriot food.
- **Efes** (King Street) is a Turkish restaurant with great meze.
- **The Vaults** (Trinity Street) has high-quality food in a classy atmosphere. It's also a good place to go for cocktails (Happy Hour 5-7 with two cocktails for the bargain price of £6 – at last count anyway!)
- **Rainbow** (King's Parade) is a great spot for *vegetarian/vegan/wheat-free*-food lovers.
- **La Tasca** (Bridge Street) is a Spanish Tapas Bar which is very busy most nights. All the tapas you can eat (from a restricted menu) for £10 on Mondays.

There are a number of **Indian Restaurants**, many of them on Castle Street. These include The Maharajah (good food, egregious service), The Cambridge Curry Centre (reasonable food, friendly staff) and the Star of India Tandoori on Victoria Road (good food). Total cost is always around £12 per head.

Cambridge also has a few **Thai Restaurants** with the Bangkok City in Green Street the closest to town. The food is excellent but not cheap. The Wrestlers pub on Newmarket Road also serves good Thai, and there is always the Sala Thong on Queen's Road.

There are a number of **Oriental Restaurants**. AkiTeri is popular for sushi and other Japanese culinary delights (just by the bridge, Magdalene St). Charlie Chan on Regent Street does

good dim-sum at lunchtime, but the noodles-in-soup are often a letdown. If you're into Japanese noodles then Dojo's on Mill Lane or Yipee on King's Street aren't bad (if a little heavy on the MSG). Wagamama on St Andrew's Street is a national chain restaurant providing excellent Asian, MSG-free food at reasonable prices (£8 for a main).

**Fast Food** is not absent in Cambridge either. There is a McDonald's in Rose Crescent, a Burger King in St Andrew's Street, a KFC at the Grafton Centre and Pizza Hut on Regent Street. Gardenia's in Rose Crescent is a big favourite with students and is open late. The alternative to this is the Van of Life (Mister Burger's Van), which is parked on the college side of Market Square. The van on the other side is the Van of Death. Enough said.

## Donors

### Principal Donors:



### Other Donors:



Parts of this guide have been used with kind permission from the Samuel Butler Room society, St. John's College.