First Degree Mathematics at Cambridge
For Overseas (Including EU) Students
An Extremely Unofficial View

Small print  This essay is a PERSONAL view and does not replace the official advice which may be obtained from the University and the Colleges (see Section 1 below). Although I have tried to be helpful the advice may be INCORRECT, or OUT OF DATE or MISLEADING or may not apply in your particular case. I and my advice have NO OFFICIAL STANDING. The advice, incorrect or otherwise, applies ONLY TO MATHEMATICS. I should be glad to be told of errors or of any way in which these notes could be made more useful. The guide is written in \LaTeX{} and is, I hope, available by anonymous FTP as /pub/twk/Over.tex at 131.111.24.1. It can also be obtained by gopher or on the Web, see the instructions at the end of the guide. My e-mail address is twk@dpmms.cam.ac.uk. Please write to the address at the end if you cannot get this file electronically. However if you require further information help or advice you must write to a college or the university (see Section 1 below) and NOT to me. T.W.Körner (Trinity Hall).

Contents

1  Preface  2
2  The place of the college  4
3  Main introduction  4
4  What is the date?  5
5  Do you really wish to do mathematics at Cambridge?  5
6  Can you afford to do mathematics at Cambridge?  6
7  Are you prepared to make a ‘standard application’?  7
8  References  8
1 Preface

This note is not meant to supply information but to make you think about what the information means. There are three major sources of information that I recommend. All are on the web but may also be obtained by post.

The quickest way of obtaining detailed information on the content and structure of the Cambridge mathematics course is via the web starting at

http://www.maths.cam.ac.uk/undergrad/admissionsinfo/

and following the links. If you can not get the web write to
Undergraduate Admissions,
The Faculty of Mathematics,
Silver Street,
Cambridge CB3 9EW,
United Kingdom.

(note that, in spite of the address, this merely gives advice and does not handle admissions) explaining that you can not get the web, giving your address and asking for documents about admission and course content.

Details of the colleges and courses are found in the ‘University of Cambridge Undergraduate Prospectus’ accessible via the web on

http://www.cam.ac.uk/CambUniv/ProspStudents.htm

Of course, this is mainly a recruitment brochure packed with happy smiling faces and happy smiling statements but it contains a substantial amount of useful information and will help you choose a college. In the opinion of the present writer your main task is to decide whether you want to do mathematics at Cambridge and the choice of college is a secondary matter.

The pamphlet ‘Information for Overseas Students’ is accessible via the web on

http://www.cam.ac.uk/CambUniv/Overseas/#heading1

In typical Cambridge style it starts by telling you that the University is known to have been in existence since 1226\(^1\). However, it is packed full of useful information and should be read carefully.

The pamphlets ‘University of Cambridge Undergraduate Prospectus’ and ‘Information for Overseas Students’ can be obtained by post from many different addresses but the simplest way is to write to any college asking for them. The simple address

Admissions Tutor
X college
Cambridge
England

will always work. If you feel unhappy about choosing a college at random you can always write to my college.

\(^1\)Equally typically it neglects to tell you that Cambridge was one of the smaller and less prestigious mediaeval universities.
Admissions Tutor  
Trinity Hall  
Cambridge CB2 1TJ  
England

You do not commit yourself in any way by asking for information. In these notes ‘overseas student’ is used in the non-technical sense to mean a student from outside the UK.

2 The place of the college

Those who are used to the Paris Metro find the London Underground baffling. Those who are used to the London Underground are baffled by the New York Subway System and the confident habitués of the NY system are baffled in turn by Parisian public transport. If you choose to study in a foreign country you choose to study in a different culture where even the simplest things may appear strange.

One of the strangest things about applying to Cambridge is that you apply not to the University but to a college. In practice this makes remarkably little difference (though it does have the advantage that instead of dealing with a faceless bureaucracy which handles thousands upon thousands of applications you are dealing with a small office which handles a few hundred applications and knows each of them as an individual case).

I shall make a few remarks about the choice of college later but I suggest that you ignore this matter for the time being.

3 Main introduction

At the graduate level Cambridge University is an international university which happens to be in the UK. Our famous Part III one year graduate mathematics course has more students from outside the UK than from inside and we are similarly international at a higher level. Our admissions procedure, scholarships, teaching and so on are geared to an international clientele.

At the undergraduate level Cambridge is a national university which happens to have some students from outside the UK. Less than 10% of our undergraduate students come from abroad and, although most of them seem

\footnote{For certain purposes to do with fees ‘overseas student’ means something entirely different (see Appendix 1 of the ‘Graduate Prospectus’). This particular lunacy is forced on Cambridge by the British Government.}
happy to be here, they have had to adjust to us and not us to them. Our admissions procedures, teaching and so on are strongly geared to the British school system.

There are various questions you should ask yourself before considering an application to Cambridge to read mathematics.

1. What is the date?
2. Do you really wish to do mathematics at Cambridge?
3. Can you afford to do mathematics at Cambridge?
4. Are you prepared to make a 'standard application'?

I will deal with these questions in turn.

4 What is the date?

All application for undergraduate entry have to be in by a fixed date sometime in the middle of October for entry in the following October. Thus applications for study starting in October 2000 will have to be in by 15 October 1999. (Exact dates are given in the pamphlets 'Information for Overseas Students' and the 'Undergraduate Prospectus', see Section 1.) You MUST complete your application by this date and the University suggests that you should start 18 months before you hope to begin your course by contacting the college to which you wish to apply. Although the form filling involved is no worse than that for most US universities it does require a little time to get right (you will need to fill in one set of forms for Cambridge and a second set of forms for a body called UCAS which is in overall charge of all applications to British universities). It is not the kind of thing which can be done by fax in the last 24 hours before the deadline. (Indeed the rules specifically exclude faxing your forms.)

5 Do you really wish to do mathematics at Cambridge?

When I ask overseas candidates this question they look at me as though I have gone mad. Surely everybody wishes to study mathematics at a world famous university with excellent teaching and pleasant surroundings. But further questioning often shows that they want from the Cambridge mathematics course things that it does not give. Please bear in mind the following points.

Cambridge mathematics is a specialist course If you study mathematics in Cambridge you study only mathematics. You can not study mathematics
with a subsidiary course in literature, say. The course consists of mathemat-
ics followed by more mathematics varied by a little more mathematics.
(This statement must be modified in various ways, see the ‘Undergraduate
Prospectus’ but is essentially true.)

Cambridge mathematics requires you to take some courses in every branch
of mathematics You can not come to Cambridge just to do pure mathematics
or just to do applied. For the first year and a half you have to do everything
though thereafter you have to specialise (too much in my opinion).

Cambridge mathematics is exam orientated Teaching and lecturing are al-
ways directed towards the end of year exams. The end of year exams consist
of four three hour exams and your grade for the year is decided by those
exams.

Cambridge mathematics has a competitive flavour I do not wish to over-
emphasise this point but it is inevitable that a course which attracts many
of the best young mathematicians in the UK will attract many of the most
competitive young mathematicians in the UK. (Moreover, since the number
of awards to do research for UK students is limited those who wish to continue
must aim for good examination results.)

Cambridge mathematics is illiberal The Cambridge course contains nothing
on the philosophy of mathematics or the history of mathematics. Your lec-
turers expect you to want to learn lots and lots of mathematics and not to
be delayed by discussions of why you should want to do so.

Briefly, the Cambridge course is a course run by professional mathematici-
cans for those who wish to become professional mathematicians. If this is
the kind of course you want then it is, I think, an excellent course. Otherwise,
caveat emptor\(^3\).

6 Can you afford to do mathematics at Cam-
bridge?

(Or more usually, can your family afford for you to do mathematics at Cam-
bridge?) The cost of studying in Cambridge is substantially less than than
that of studying at a comparable US university but is still very high for non-
EU students and high for EU students. Because the course is so intense you
are forbidden to take paid work during term time and there is no possibility of
working your way through college. The University estimated the cost of fees
and maintenance for a non-EU student in 1997/1998 doing mathematics at

\(^3\)Let the buyer beware.
£11000 and the cost rises year by year. (Consult this year’s ‘Undergraduate Prospectus’ for the latest figures.)

Cambridge University and its colleges are committed to try and ensure that no UK student of the appropriate ability is prevented from studying in Cambridge for financial reasons. This policy is likely to strain the resources of the colleges to the utmost in the next few years and there is no way whatsoever that we could extend this policy to cover students from the rest of the world. Unless you are exceptionally brilliant (in which case look at section 11) you (or your family) will have to raise the money yourself. (There are possibilities . . . some of our students have industrial sponsorship, some foreign students are supported by their own governments, some US university loan schemes cover Cambridge . . . but it is up to you to follow them up, not us.)

Even if you can find the money it is important that you use it to buy something that you want rather than something that you think you ought to want (or worse that your family thinks you ought to want). Ask yourself: ‘If Cambridge was a collection of Nissen huts in the Outer Hebrides, but gave exactly the same courses with the same teachers would I still wish to go there.’

7 Are you prepared to make a ‘standard application’?

A college will find your application easiest to deal with if it satisfies the following conditions

(1) You will be 18 years old in the October that you wish to start the course. (If you would be under 18 look at section 12, if you would be over 18 look at section 13.)

(2) You make it clear that you are prepared to take papers 2 and 3 of the STEP mathematics exam. (For details of STEP see section 14. If you are not prepared to take STEP see section 15.)

(3) It is clear that you (or your family) can support you for three years. (The details can be worked out later but remember that you will not be allowed to start the course unless your support is guaranteed.)

(There are other less important matters which are dealt with in Section 9.)

Such an application will be welcomed at any college since it can (and will) be treated almost exactly the same way as that as that of a UK applicant. If you can not make such an application then you are still welcome to apply but the college will have to consider your application specially.

7
8 References

Most British students will have references written by their mathematics teacher or by their head teacher in collaboration with their mathematics teacher. The key parts of the reference will read something like this.

X came to us from one of our feeder schools with excellent GCSE results in science and mathematics and respectable results in other subjects. Her mathematics teachers say that she is the one of the two best students in her year and as good as two of our previous students who got firsts at Warwick and KCL. In her previous school she took part in the national mathematics contests obtaining a silver and a gold. Although she is very quiet in class she thinks about everything that is said. When she knows a method she applies it efficiently but when working in novel situations she often comes up with solutions of her own. Her physics teacher says that though her approach is that of mathematician he could confidently support an application to any physics department in the country. We expect her to obtain straight A’s in Mathematics, Further Mathematics and Physics.

You will see that the key portion of the reference is concerned with providing evidence of the candidate’s mathematical ability. The best kind of reference you can provide will come from someone like your mathematics teacher who is in good position to judge your mathematical ability and will do their best to assess your suitability for a very hard and intense mathematics course. Naturally, the reference will deal with your other personal qualities but your mathematics is our primary concern.

9 Less important matters

There are other matters which you will need to agree with the college to which you apply.

Matriculation UK candidates must have passed certain examinations in other subjects (this is called matriculation). You and your college must be able to show the University that you have achieved appropriate equivalent

---

4In particular, the Cambridge mathematics faculty is not in the business of selecting or producing English gentlemen. Many of my colleagues are not English, many are not gentlemen and even the few who are both English and gentlemen are not, for the most part, English gentlemen in the proper sense of the term.
standards. Since most of the candidates who apply for Cambridge mathematics have done well in all their school subjects this is rarely a problem but the requirement is not a mere formality.

Command of English It would be foolish to attempt the course without a good command of English. (In particular, at least one of the lecturers uses the same kind of English that this note is written in.) Where necessary you and the college will need to agree on an appropriate test. Again this is rarely a problem but it is not a mere formality.

Interview Almost all UK candidates are interviewed. The colleges appreciate that it is inconvenient and expensive for candidates from overseas to came for interviews which typically last about an hour in total. If a college thinks that it can come to a fair decision without an interview it may dispense with interviews. If an interview is required then it may be possible to offer you a choice of dates.

10 Choice of College

You should not spend too much time worrying which college to apply too. Mathematics is a jewel in the Cambridge crown and all colleges maintain a high standard of mathematics teaching. A network of formal and informal contacts between colleges and between colleges and the departments means that you can expect to be taught the same things in the same way whichever college you go to. In the same way an informal community of interest and the formal mechanism of the Winter and Summer pools (see the section on the process of applying in ‘The Undergraduate Prospectus’) means that the standards required for entry remain the same for all colleges. Almost all undergraduates are happy with the college they end up in (and I suspect that most of the rest would be unhappy anywhere).

As an overseas candidate you need to make your application early so that any problems can be sorted out. If you do not specify a college you will only be assigned a college quite late. I therefore advise strongly against making such an ‘open application’. Instead make a list of the colleges you like and choose one at random. (Then check the details of your chosen college and if you have second thoughts, choose another.)

There are some obvious differences between colleges (for example New Hall and Newnham are women only) but, in my opinion, you may safely ignore any differences which are not obvious.
11 Scholarships

Because of the particular historic path taken by higher education in Great Britain, Cambridge has only recently begun to build up scholarship funds for students from outside the UK. The awards available are mainly for postgraduate study and competition for undergraduate scholarships is very fierce indeed. Details are available from

The Cambridge Overseas Trust
[or The Cambridge Commonwealth Trust]
Trinity College,
Trinity Street
Cambridge CB2 1TQ

In my opinion you should only follow this path if you really need a scholarship and if you really are brilliant (say as good as those in the top 10% of students doing mathematics at Cambridge). Remember that UK students are now expected to pay their own living costs (they receive a government loan of about £3000 a year with very favourable terms and must borrow any further amount commercially). If you can raise part of your costs yourself through sponsorship, other awards and borrowing the Trusts may be more willing to close the gap.

12 Young candidates

If you will be under 18 on 1 October when you wish to start your course then your College will need permission from the University to admit you. If you are only a few months younger there will normally be no problem. If you are younger than this the University and the College will need to be convinced that you are not only not merely academically but also socially ready for university life. It is contrary to University policy to admit students much younger than 18 and it is very rare for exceptions to be made.

13 Older candidates

There is no upper age limit for entry to Cambridge. However, if you are going to be substantially older than the usual candidate (certainly if you will 20 or older at the start of the course) the college will wish to know why you are starting so late. The number of older students doing undergraduate mathematics at Cambridge is very small and my impression (though others
may disagree) is that many of them find the experience very stressful. If you are a mature student (the British government in its wisdom classifies any one who is 21 or over at the start of the course as ‘mature’) you should think very carefully about what you want from a mathematics course and whether Cambridge with its hectic pace and macho approach is going to give you what you want. You could also consider applying to one of the four colleges (Hughes Hall, Wolfson, St Edmunds and the women-only Lucy Cavendish) which specialise in mature and graduate students and are more likely to provide the support and back-up that you need. (Again this my personal view, some of my colleagues disagree.)

14 What is STEP?

Many more applicants for Cambridge mathematics get the highest grades in the English public exams than there are places. Most UK mathematics applicants are therefore asked to take two three hour papers in mathematics (STEP II and STEP III) which cover the same syllabus but ask more searching questions. If you are prepared to take these papers this will enable the college to

(a) check that you have the mathematical background to cope with the course,

(b) compare you fairly with its UK applicants.

If you do well in STEP this should also reassure you that you should be able to cope with the work here. (Most Cambridge mathematics students go through a phase when the work seems impossible and everybody else seems much cleverer than they are.)

You can obtain the syllabus for STEP together with past papers from the STEP office at the address

STEP Office
OCR
1 Hills Road
Cambridge CB1 2EU

If there is time, it would be a good idea to get hold of these before making your application (there is a sample paper on the Mathematics Faculty Website referred to in Section 1). Since UK students cover different courses you are not expected to cover all the topics. In the exam you will be given a choice of 14 questions and only your best 6 questions are taken into account. We are not interested in what you can not do but in what you can. A candidate who can complete 4 questions is normally considered to have done well.
If you wish to use the syllabus as a guide to the background knowledge of our UK students you should note that very few will have done both the mechanics (Part B) and the probability (Part C) and some will have done neither. On the other hand, most will have covered most of the pure mathematics (Part A). Previous knowledge of mechanics (Part B) is generally considered more helpful in tackling the Cambridge course than previous knowledge of probability (Part C) though both are useful and neither is necessary.

The technical details of taking the exam are relatively simple. You should ask your school (or some similar institution) to contact the STEP office (see the address given earlier). They will arrange for your school to be registered as an ‘examination centre’ and send instructions on how the exam is to be conducted.

15 What if you do not wish to take STEP?

Most colleges ask UK mathematics applicants to do STEP. This does not necessarily mean that they will not consider non-UK applicants who do not wish to take STEP but it does mean that you should write early and before making a formal application to the college (or colleges) that you are thinking of applying to, explaining which exams you will be taking and asking whether they would be prepared to consider you on that basis.

16 A note of caution

All colleges try to select the best mathematicians they can. (What else would it be sensible to do?) However we know that we make many mistakes even when selecting UK students. Sometimes we admit students who do badly in the course, more often we reject students whose performance at other universities show that they would have done well here. If we make mistakes when dealing with students whose educational background we know well it follows that we will make still more mistakes when dealing with students from educational systems which we are not familiar with. Even if Cambridge is your first choice university you must have alternative plans in case your application is not successful.

If your College accepts you subject to a specified performance in some examination you must still have an alternative plan ready. However confident you are of success, you might be ill when the exam is to be taken or the exam may be harder than you expected.
17 What if you change your mind?

If your college accepts you or accepts you subject to certain conditions it is committed. Provided that you satisfy whatever conditions the College has made it must take you.

You are not committed in the same way. We do not want unwilling students and if you decide not to come to Cambridge you should simply write to the College telling them so. All we ask is that you write at once so that your place can (if possible) be offered to someone else. Please remember that if you turn down a place after the middle of August you will probably have deprived someone of a place at Cambridge.

18 Visas

Unfortunately we live in a world whose politicians believe in the free movement of goods and the restricted movement of people. It is up to you to apply for visas and so on (although your College will write in support).

19 A Year in Cambridge?

Sometime people ask if they can spend a single undergraduate year in Cambridge. This does not seem to me academically advisable (at least in mathematics) since the Cambridge course consists of three linked years in which lectures for one year depend strongly on those in the previous year. Occasionally absolutely outstanding students have made a success of such a year (though even they find the experience pretty tough) but there have also been serious problems. Most colleges do not accept such ‘occasional students’ but a few accept a very small number (see the pamphlet ‘Information for Overseas Students’).

On the other hand the Cambridge Faculty of Mathematics runs a one year course called Part III which is taken by students from all over the world as a link between undergraduate studies and the PhD. If you want to spend a year doing mathematics in Cambridge (and you are able and hard working) why not look at Part III?

20 Transfer from other universities?

Sometimes people wish to change in mid-course from other universities to Cambridge. Such an application is very unlikely to succeed and University
regulations mean that you would have to start from scratch. In Cambridge nothing is impossible and you can make such an application to college but I would expect you to get a polite brush off.

21 A Second First Degree?

The Cambridge mathematics degree is very intense and students cover a great deal of ground. If you are very able but have a first degree from a university where the mathematics degree is not very advanced it may make sense to apply as an ‘Affiliated Student’ taking the second and third year of the Cambridge mathematics course (or possibly the third year together with Part III) to obtain the Cambridge first degree. (See the pamphlet ‘Information for Overseas Students’). However, financial considerations are likely to loom very large in such a case.

22 Some final warnings

The reader of these notes may find them cautious to the point of being unwelcoming. ‘Surely’ the potential student will say, ‘even if there is some risk, it is a risk that I am prepared to take and no business of yours.’ To this there are two answers. The first is that it is our business. If you fail, or even if you do badly then it causes a substantial number of problems for your College and your teachers. Worse, if you are unhappy at Cambridge you have denied a place to someone who might have been happy here.

The second answer is perhaps more to the point. There is all the difference in the world between someone who takes a risk recklessly without thinking things through and someone who after carefully weighing the alternatives takes a calculated risk. If you come to Cambridge from overseas to be a mathematics undergraduate you will be making three transitions

(1) from the adolescent, protected world of school to the adult, unprotected world of university,

(2) from the easy pace of school mathematics to the breakneck speed of one of the world’s hardest courses,

(3) from one culture to another.

Experience shows that students find each of these transitions very hard and that some fail to make the jump. You will be attempting all three. Why should you succeed where others fail?

I have never known an applicant who did not say that that he or she would work as hard as necessary if accepted and who did not believe what
he or she said. On the other hand I have known quite a few students who
failed to work as hard as necessary when accepted. To see why this might
be so, observe that most of our students were the best mathematicians in
their previous schools (and if you are not in this happy position, you should
think yet again before applying) but now find themselves merely average.
Sometimes they are simply caught unaware by the amount of work required
to keep up. Sometimes they have other interests — chess, mountaineering,
playing the violin, . . . — and are unwilling to cut down on these pursuits when
mathematical work requires it. Sometimes, faced with a situation where no
matter how hard they work there will still be others better than they are,
students consciously or unconsciously decide that if they can not be first then
they would prefer to be nowhere. You should ask yourself how you would
cope with being just one average student among many.

23. Modified by a few words of encouragement

If you love ballet this may mean that you love watching it from a comfortable
place in the stalls. If on the other hand you love ballet so much that you
wish to be a ballet dancer then you must go to ballet school where you will
spend a great deal of time doing in exercises, a little of your time performing
and hardly any time discussing the beauties of ballet. Not all the pupils at
ballet school go on to be ballet dancers and, in the nature of things very few
go on to be great dancers — but if you want to be a ballet dancer you must
go to a ballet school.

Cambridge is one of the great mathematics schools of the world. A look
at the incomplete list at

http://www.cms.cam.ac.uk/mathematicians.html

shows that Cambridge is both a leading research centre and a leading teaching
centre. (Some universities have eminent teachers, we have both eminent
teachers and eminent pupils.) Moreover we still link teaching and research.
The great Professor X not only adorns our list of staff, he also teaches first
and second year courses.

We can not promise that if you come to Cambridge you will be happy.
Most of our students seem reasonably happy but a few are deeply unhappy.
We can not promise you lectures or courses perfectly attuned to your needs.
If there are 200 students in the audience then the lecturer must be going too
fast for some and too slow for others. Most of our staff are too busy doing
mathematics to pursue the *ignis fatuus* of pedagogic perfection. There is no royal road to mathematics even at Cambridge.

What we can promise is the presence of able staff and the company of talented students in an atmosphere imbued with mathematics.

## 24 Another British university?

Perhaps you want to study mathematics at a British university but you would like a course which is less intense, or more open (possibly combined with another subject) than that at Cambridge. The cost of study at other British universities is comparable with that of study at Cambridge (some will cost more, some less, the information should be obtained from the university concerned) so it is unlikely to be a determining factor.

There are several guides which give details of all British universities (PUSH, Virgin, Times, . . .). In my view, none of them can be relied on for detailed comparisons (ask yourself how you would collect information on one hundred or so institutions and remember that what is said of a university as a whole may not apply to the mathematics department in particular) but they do give you a rough idea of what is on offer. Once you have decided on what you want — campus/non-campus, London/non-London, methods of examination, industrial links, . . . — you should draw up a short list and investigate each individually. A letter addressed to

\[
\text{Undergraduate Admissions,} \\
\text{Department of Mathematics,} \\
\text{University of X,} \\
\text{Xville,} \\
\text{United Kingdom.}
\]

will certainly find its way to the correct office which will be delighted to send you all the official information that you need. Most mathematics departments maintain a web page and these pages are accessible via

http://www.ma.hw.ac.uk/uk_maths.html

Most universities have an ‘Alternative Prospectus’ written by students (for the ‘Cambridge University Alternative Prospectus’ see the section of useful addresses in the official ‘Undergraduate prospectus’). In practice this is less useful than it sounds since four years out of every five the alternative prospectus will be written by students who are every bit as keen on the place as the writers of the official prospectus and the fifth year it will be written by students so disaffected as to be unable any good whatsoever in the system.
There exist lists purporting to rank UK universities in order of merit but they suffer from three defects. The first is that a one dimensional scale of merit is impossible (if university A has better student housing than university B but university B has better social facilities than university A then which you prefer will depend on the weight you attach to each factor). The second is that all the British lists I have seen are compiled by rather foolish methods (you may disagree but before doing so you should check how the ordering is obtained). The third is that they refer to the universities as a whole and not to the mathematics departments within them.

In my opinion (and it must be emphasised that the following paragraph is only my opinion) the most important single indicator you can use is the offer level for each department. This is given in Brian Heap’s ‘How to choose your degree course’. (Try to get a reasonably recent edition from a library.) Of course, nothing can be read into small variations in offer level but it is obvious that on the whole students at an institution with a high offer level (say, AAB at A-level) will be abler and start the course with a higher level of knowledge than those at institutions with a lower offer level (say, CCC at A-level). The courses at a high offer level department will thus on the whole start at a higher level and proceed at a faster pace than those at a department which makes lower level offers. Note that this says nothing about the quality of teaching (which I suspect differs rather little between British universities) but only about the nature of what is taught.

Applications to British universities are through a body called UCAS whose address is

UCAS
Fulton House
Jessop Avenue
Cheltenham
Glos
GL50 3SH

The rules governing applications are fairly complicated but there are two essential points:-

(1) You can apply to several universities at the same time. (Though you can not apply to both Oxford and Cambridge at the same time.)

(2) You need to apply almost a year in advance. (The exact date will vary from year to year but in essence if you wish to start in Autumn of 1999 you should try and get things done by mid October 1998.)
Also available:-
  ‘Dr Körner’s Helpful Guide For Mathematicians Seeking A Cambridge Research Fel-
lowship’,
  ‘In Praise of Lectures’ (how to listen to a mathematics lecture),
  ‘An Unofficial Guide To Part III’,
  ‘How to Write a Part III Essay’,
  ‘A Supervisor’s Primer’.}