The Mathematics Open Day at the Centre for Mathematical Sciences

The Centre for Mathematical Sciences (building "X" on the Open Day map) is about a 20 minute walk (and a 5 minute cycle ride) from the centre of town. It is the home of mathematics teaching and research in Cambridge.

Formal Programme

from 12:20	Core	Mathematics Faculty open for visitors, cafeteria open.
12:25 – 12:50	MR3	**'The (mathematical) life of a STEP question',** talk
12:35 – 13:20	MR9	**Talk for parents** about the course and careers.
from 12:55	MR4	**'What are interviews like?'** - practical sessions starting at **12:55, 13:35, 14:15, 14:55, 15:40**.
from 13:00		Tours of the Faculty and the Betty & Gordon Moore Library start - meet in central Core. The number of participants per tour is limited; tours at regular intervals throughout the afternoon.
from 13:00	MR2 & MR3	**'Mathematics at University' talks**, including sessions on 'Admissions & STEP', and 'Structure of the Course + Topic Taster'. Talks **start at 13:00, 13:30, 13:45, 14:25, 14:30, 15:10, 15:40 and 15:45** (see Timetable).
from 13:00	Core	**Informal drop-in** with academic members of staff and students, throughout the afternoon.
13:35 – 14:20	MR9	**Talk for parents** about the course and careers.
15:20 – 16:05	MR9	**Talk for parents** about the course and careers. *(5 min later than previously advertised)*

✦ Lecture Rooms MR2, MR3 and MR4 are down the stairs immediately in front of the entrance to the main CMS building.[1]

✦ Lecture Room MR9 is opposite the end of the bridge accessible to left of the cafeteria at the *far* end of the "core".

✦ Please be aware that there may not be enough space for any/all parents, carers and teachers who wish to attend the 'Mathematics at University' talks in MR2 and MR3. These are primarily intended for students. If numbers exceed those permitted by fire regulations, non-students will be asked to leave.

Informal Programme

✦ Throughout the afternoon there will be some of our current students available to answer questions on the course from a student perspective. Most students are wearing light-blue T-shirts. If they do not approach you, please approach them. They are very friendly.

✦ Throughout the afternoon you'll be able to watch videos about mathematics and the Cambridge undergraduate course.

✦ Throughout the afternoon you'll be able to browse a display of posters and other information material about:

◆ Mathematics societies ◆ the Millennium Mathematics Project ◆ STEP

✦ For those who want refreshments, there are free biscuits and squash available, and coffee, tea and other snacks can be purchased from the cafeteria at the *far* end of the main "core" building. Parents and carers may prefer to retreat to the cafeteria rather than attend the mathematics talks!

✦ Free Wi-Fi is available for visitors. Please ask at Reception.

If you would like to see the grass roof (where it has not been unknown for snow-ball fights to take place between the departments), please ask one of the students or members of staff organising tours of the building. Otherwise you are welcome to walk round the building.

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1 There are also toilets down the stairs.

The Centre for Mathematical Sciences

The CMS has one of the largest concentrations of mathematicians in the world: there are around 280 offices, lots of collaboration/coffee spaces, and about 600 academic staff, postgraduate students and support staff (only some of whom are here in July). Students attend the CMS for third-year and fourth-year lectures, as well as for some supervisions[2]. Many students in all years also like to camp in the CMS "core" with their friends. During term the core is full of students, and it is possible for 50 simultaneous conversations to be taking place without others noticing (the wooden baffle slats on the ceiling really work).

The building comprises seven mathematics "pavilions" and the core. Each pavilion houses different groups of mathematicians in broadly similar areas including:

- pure mathematics such as number theory, geometry, topology and analysis (some of the most exciting research is in the overlap between these topics);
- statistics such as quantitative finance and biostatistics (you may have heard of David Spiegelhalter);
- applied mathematics such as quantum information, fluid/solid mechanics (including the theory of avalanches, ocean physics, climate change) and mathematical biology (including the spread of infections and the shape of pony tails);
- theoretical physics such as string theory and what makes up the universe beyond the well-known protons, electron and neutrons (you may have heard of Stephen Hawking and Michael Green).

Each Pavilion has a common room, and there are blackboards in communal areas (including corridors) to enable collaboration and the creative process of mathematics wherever it strikes. There is also a fluid mechanics laboratory (yes, some mathematicians do experiments), and the "COSMOS" super computer running models of galaxy formation, etc.

In addition to the Maths building, the site is also home to the Betty & Gordon Moore Library (which holds maths, astronomy and theoretical physics books and journals on 9 km of shelving, and which is also used as a quiet place to work), and the Isaac Newton Institute (INI): a research institute that attracts visitors from around the world, and where Andrew Wiles announced his proof of Fermat's Last Theorem.

Map with pedestrian route from the Marquee on the Sidgwick Site to Centre for Mathematical Sciences:

We recommend that you walk. The Universal bus service is also available between the stops marked by ⓤ , with limited seating and pick-up/set down at each stop every 20 minutes or so.

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2   First-year and second-year lectures are held in town. In Cambridge we use the term "supervisions" to refer to small group teaching (typically consisting of two students and one supervisor; other Universities often refer to such teaching as tutorials, and some think that a group of ten to twelve students is "small").