DEAR EDITOR,

The Mathematikum: Germany’s hands-on mathematical experience

While touring in Germany last year, we discovered, somewhat by chance, a splendid institution called the Mathematikum. It is located in the university town of Giessen, 60 km north of Frankfurt. It describes itself as the ‘world’s first hands-on mathematical museum’. It was founded in 2002 by Professor Albrecht Beutelspacher of Giessen University. Prof. Beutelspacher is roughly the German equivalent of Ian Stewart and Marcus du Sautoy, tirelessly appearing on the media and giving lectures aimed at interesting the public in mathematics, but the Mathematikum is his biggest and most permanent initiative.

Occupying a four-storey building, the Mathematikum is a massive display of exhibits, puzzles and games. Even without spending time on the puzzles (some of which were by no means easy!), we found that two and a half hours was not nearly long enough to see it all. School-age children are certainly the most targeted audience, but there is plenty to interest anyone with an enquiring mind. A special section, the Mini-Mathematikum, is aimed at the age group 4-8.

As claimed, a great number of the exhibits are indeed hands-on. Explanations are in German and English. Squares composed of smaller squares; Penrose tilings; an optimal route round the German state capitals (using string provided); and much, much more. One of the most popular ones was the soap-bubble apparatus, including a frame large enough for an adult to stand inside. We cannot begin to list them all here, but a selection can be seen on the website (www.mathematikum.de/en). A complete list is available in book form (in German) at a price of about 30 euros.

Attendance is further encouraged by the fact that the Mathematikum is open every day except Christmas and New Year, until 6 p.m. on weekdays and 7 p.m. on Saturdays and Sundays. Visiting on a Saturday afternoon, we saw large numbers of children with parents. School groups are regularly received during the week.

As well as the standing exhibits, the Mathematikum has a regular and lively programme of events and lectures. This institution (the designation ‘museum’ perhaps does it less than justice) is a great asset to its area of Germany, and it would be good to see similar ones arising elsewhere in the world.

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