The Open University

## Second Adventures in Astronomy

A Day On Mercury

## David Mitchell:

Sixty second adventures in astronomy. Number four, a day on mercury. No two planets act exactly the same. Whether it's Jupiter spinning in only ten hours, Venus spinning backwards or Uranus tilting to one side. But Mercury is particularly strange. It takes nearly fifty-nine Earth days to rotate. Which might make for a pretty long day, but at least you'd have time to get things done.

But while the days are long on Mercury, the years are relatively short. It travels round the Sun in just eighty-eight Earth days.

Now, until 1965 we thought Mercury span exactly once per orbit - which would mean that one side of it was always facing the Sun.

If it span twice every orbit, its day would be the same length as its year, which would at least make calendars nice and simple.

But it actually spins three times for every two orbits. Which means each Mercury day lasts for two Mercury years.

So, while you might get a bit bored waiting for the evening, at least you'd be able to celebrate your birthday twice a day.

Even if you had to share it with everyone else.