

Possible life on 100 planets, new study suggests

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100 planets near to earth could potentially harbour life.

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The Milky Way is home to tens of billions of rocky planets - including about 100 nearby - that could potentially harbour life, a new study has concluded.

Astronomers spent six years observing 102 of the most common type of stars in our galaxy, known as red dwarfs, to come up with this direct estimate of planets in the habitable zones around them.

They calculated that about 40 per cent of red dwarfs have super-earths - planets with masses between one and ten times that of Earth - in the not-too-close, not-too-distant zone where liquid water can exist.

The research team leader, Xavier Bonfils, said about 160 billion red dwarfs - fainter, cooler and longer-lasting stars than the sun - exist in the Milky Way.

"Because red dwarfs are so common this leads us to the astonishing result that there are tens of billions of these planets in our galaxy alone," Dr Bonfils, of the University of Grenoble in France, said.

Within 30 light years of earth, there are probably one hundred of these super-earths in habitable

zones, he said.

While the temperature on these planets would be suitable for liquid water, red dwarf stars commonly experience eruptions or flares.

The x-rays and ultraviolet radiation released by these stellar events could reduce the chances of life existing there, the researchers said.

They used a European Southern Observatory telescope in Chile to make the observations and the results are to be published in the journal *Astronomy and Astrophysics*.

In the past 16 years astronomers have detected more than 700 planets outside our solar system, many of them massive planets, similar to Jupiter or Saturn, more than 100 times bigger than Earth.

The latest study, which looked at changes in the light spectrum of the stars to infer the presence of planets, suggests these giants are rarely found around red dwarfs.

It identified nine rocky super-earths. One was in a triple star system, known as Gliese 667.

This planet, Gliese 667 Cc, is the closest twin to our planet.

- AP