

World population not likely to stabilize at 10 billion people

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Projections suggesting the world human population will stop growing around 10 billion people at the end of this century are improbable, according to new research by SFI Postdoctoral Fellow Marcus Hamilton and collaborators.

While there could be stagnation over the short term, even small fluctuations in the energy or food supply could cause the [population size](#) to deviate from the 10-billion mark, and enter another period of strong growth, according to results of modeling by Oskar Burger at the [Max Planck](#) Institute for Demographic Research, John DeLong of Yale University, and SFI's Hamilton, published in the journal *Frontiers in Ecology and the Environment*.

The model is based on the observation that population growth strongly depends on per capita energy use: if more energy is available, economic development will continue, which will in turn put pressure on birth rates. If birth rates are sufficiently low throughout the world, the [global population](#) will stop growing.

The researchers' model is thus at variance with the projections of the United Nations, which simply extrapolates a trend towards declining numbers of birth observed over the past several decades.

"The upper limit suggested by the United Nations hardly represents a [stable equilibrium](#)," says Burger.

More information: Read the paper in *Frontiers in Ecology and the Environment* (March 2013).

www.demogr.mpg.de/en/news_pres..._improbable_3131.htm

Provided by Santa Fe Institute

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