

If we encountered extraterrestrial aliens, what would they look like?

With thousands of planets outside Earth's solar system, there's a pretty good chance that some of them have the conditions needed for life. If alien life does exist, scientists aren't quite sure what it would look like, but they might be able to see how much these foreign "beings" might weigh. Most of these creatures will be big — on the order of 660 lbs. (300 kilograms), one cosmologist says.

Fergus Simpson, of the University of Barcelona, outlines his statistical argument on the [prepublished site arXiv](#). The finding is based on a model called Bayes' theorem and a branch of mathematics called [Bayesian statistics](#). The purpose of such techniques is to estimate the probabilities that change depending on the information available.

But although Simpson's mathematical experiment may get scientists and others thinking about the possibilities of alien life, some researchers say some of his statistical assumptions may not hold true.

Simpson started his calculation with the number of individuals who would most likely live in a given alien civilization, and came up with about 50 million or fewer individuals. He posited that there are many civilizations in the galaxy and that any individual alien would be more likely than not to be from a highly populated civilization. The population distributions across planets would follow a bell-shaped distribution but not a true bell curve, he said in the paper. That means most cultures would support an average number of people, with fewer populations holding very low or very high populations.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Aliens Will Be Bear-Size, According to Math