IAA-99-IAA.9.1.05

How Old is ET?

Ray Norris

CSIRO Australia Telescope Network Facility PO Box 76, Epping, NSW 1710, Australia

Many people have stated or assumed that if we make a SETI detection, that civilisation is likely to be much older than ours, but few have tried to quantify this. A simple calculation with reasonable assumptions shows that ET is likely to be billions of years older than us. This number is insensitive to most of the usual uncertainties, such as the probability of life occurring in a suitable habitat, which frustrate efforts to evaluate the Drake equation. However, ET's age is dominated by two factors: the star formation history of our galaxy, and the length of time for which a civilisation can survive. In this paper I examine these and other factors and try to answer the question: how old is ET?