An Introduction to Astronomical Uniqueness

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An important part of understanding the likelihood of other life in the Universe is to establish the similarity, or otherwise, of our astronomical environment, which we know to support life, with that of the rest the Universe. Although our current knowledge suffers from various selection effects, it is nevertheless possible to examine the similarity of our local and extended neighbourhood to that of the rest of the Universe. I examine present established astronomical data and surveys of various objects at various levels – from Solar system via local solar neighbourhood, Milky Way, Local Group of galaxies, Local Cluster of galaxies to the vast Universe! Our initial results indicate a higher level of uniqueness at various levels than it is often assumed.