The impact story for exo-Earths

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Abstract

The history of asteroid and comet bombardment of the Earth will not be typical. It is important to quantify this in relation to the emergence of life, for example if stimulated by the creation of hot basins or hindered by abrupt environmental change. Surveys have recently been completed of nearby stars, imaging the belts of collisional debris that trace the underlying asteroid and comet populations. The Sun appears to be one of the most 'cleared' systems at its present age, but also one with stong dynamical connections between different orbits doe the presence of multiple giant planets. I will discuss how this affects our habitability, and that of other now-known rocky planets around nearby stars.

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