
The demographics of small exoplanets

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The diversity of the exoplanet population is beyond our imagination. The more than 5000 known exoplanets vastly differ in mass, size, orbital period, dynamics, and host type. Demographic studies, however, aim to find patterns in the population that inform us about their origin, composition, and evolution. Among these features, perhaps the most surprising is the abundance of planets with no analog in the solar system, also known as sub-Neptunes. In this talk, I will review the state-of-the-art regarding the detection and characterization of such planets and what we know today about their enigmatic nature. A definitive answer, however, seems within reach during this decade thanks to the game-changing observations that will be provided by JWST, PLATO, and ARIEL.