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Abstract for an Invited Paper  
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### **The Exoplanet Revolution**

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Exoplanet collection identified over the last 25 years ranges from massive and big planets like our own Jupiter to smaller denser objects alike the Earth. The diversity and the prolific amount of planets discovered revolutionized our outstanding about the nature and the formation history of planets. It opened up a surprising new perspective on the possible rarity of planetary systems similar to our own but also exciting prospects about the potential of probing planet atmosphere for traces of life activity. The talk will present an outlook of this landscape and will discuss the implications of these recent findings. New insights about the origins of life will be presented in the light of recent experiments about a possible origin of pre-biotic chemical building blocks as well as a possible long-range pathway for detecting Earth-like systems amenable for remote study of life.