With a matter of years, humanity will know for the first time the frequency of terrestrial planets in orbit around other stars. This knowledge will pave the way for joining research from astronomy, Earth science, and biology to understand the past, present, and future of the Earth within its larger context as one of many habitable worlds throughout the Galaxy. Such work seeks to understand the formation and fate of the Earth as well as predict where and when different bodies will be suitable for hosting cellular life.

In this four-day symposium, scientists from diverse fields will discuss the formation and long-term evolution of terrestrial bodies throughout the various phases of stellar and Galactic evolution. A particular focus will be on how the specific conditions and challenges for habitability on Earth extend to other bodies in the Solar System and beyond. This symposium will include discussions about sites for Galactic habitability that have not yet been given much attention. The existence of these overlooked environments may provide motivation for novel astronomical observations with existing and next generation ground and space-based observatories.

Confirmed Speakers

Eric Agol
Phil Armitage
Rory Barnes
Amy Barr
Bill Bottke
David Catling
Shawn Domagal-Goldman
Boris Gaensicke
Scott Gaudi
Michael Gowanlock
David Grinspoon
Ralph Lorenz
Massimo Marengo
Stephen Moisés
Alison Murray
Sean Raymond
Frank Robb
Colette Salyk
Britney Schmidt
Diana Valencia
Eva Villaver
Peter Ward
Lee Anne Willson
Don Winget

www.stsci.edu/institute/conference/habitable-worlds