

Exoplanets are distant worlds that orbit stars other than the Sun. Exoplanets affect the light of their host stars that we receive on Earth. Tiny variation in brightness and color of these stars are the signals that exoplanet scientists hunt for to determine an exoplanet. 30 Years ago, such measurements were not yet possible and exoplanets were only existing in theory. Now, the sky is full of them. Even though we cannot see them by eye. The more we find, the more the planet Earth becomes an exotic specimen. The diversity of exoplanets is breathtaking. Even the very first exoplanets found were fundamentally challenging our understanding of planet formation at that time. This is because we find very large planets very close to their stars unlike any planet in the Solar System. And the more planets we find, we realize that nature is more creative than what we could have expected from previous observations. Planets come in different sizes, surface temperatures, system architectures, compositions etc. and we wonder how likely it is to find a second Earth among this diverse zoo of worlds. What guides us in the search for exoplanets and a second Earth, is curiosity, intuition, and patience. Curiosity drives to push the boundaries of what is possible and known. Intuition guides us in complex issues or difficult questions but it's also limiting since it is based on what we know and is blind to the unknown. Patience helps to find a practice with new findings or looking at an old question again and again and again until a creative moment suddenly rearranges our understanding and a new answer can evolve. So far, we have found a handful of planets with Earth-like properties, but it still seems a long way to find the Earth 2.0. Even if some day, we can point in the night sky to the star that hosts this sister world:
We'll stay on Earth. Enjoy this planet.

Caroline Dorn, Exoplanetenforscherin Uni Zürich
Erde an Kosmos, 15.12.2020
Planetary Breathing, 37 min

Erde an Kosmos ein Beitrag der Exoplanetenforscherin Caroline Dorn für die Ausstellung Regionale 21, 28.11.2020 – 4.1.2021, im Kunsthaus Baselland mit Mitchell Anderson, Philipp Hänger, Eric Hattian, Matthias Liechti, Raphael Loosli & Arnaud Wohlhauser, Céline Manz, Anina Müller, Alexandra Navratil, Jacob Ott, Nina Rieben, Anna Schwehr, Flurina Sokoll, Romain Tièche, Jan van Oordt, Johannes Willi, Olga Zimmelova. Guests: Isabelle Spescha & InQdrT, Céline Baumann, Caroline Dorn, Dirk Benzinger, Internationale Gastronomische Gesellschaft.