ABSTRACT

A decade of exoplanet search has led to surprising discoveries, from hot giant planets orbiting their star within a few days, to planets orbiting two Suns, extremely hot worlds with potentially permanent lava on their surfaces due to the star's proximity all the way to the first potential rocky worlds in the Habitable Zone of their stars. Observation techniques have now reached the sensitivity to explore the chemical composition of the atmospheres as well as physical structure of some detected planets. Nearly two thousand planets have already been detected around other Suns. The spectral fingerprint of light of planets gives us the key to search explore them over light years away and to find the first habitable new worlds in the sky.

BIOGRAPHY

Lisa Kaltenegger is Associate Professor at Cornell University and Director of the new Institute for Pale Blue Dots. Her research focuses on rocky planets and super-Earths and their spectral fingerprint. These light fingerprints allow us to explore other worlds over lightyears away and can be detected with the next generation of telescopes. Lisa Kaltenegger’s work was highlighted in Time Magazine’s Guide to 2014 in innovations, she was names one of America's Young Innovators 2007 by Smithsonian Magazine, was selected in 2012 as one of the European Commission's Role Models for Women in Science and Research and recently received the Heinz Meier Leibnitz Prize for Physics of Germany in 2012 among several other awards.

On May 9th 2015, the Inauguration Event "Undiscovered Worlds" will bring international pioneers and visionaries in the search for extrasolar planets together on campus to share the excitement of the discoveries and discuss a path to finding the first habitable worlds, other Pale Blue Dots, in the night sky. Open to anyone who is excited about exploring other worlds. www.instituteforpalebluedots.com

Refreshments will be served at 3:15 p.m. in the P. Delaney Gallery, Bethune College.

DATE: Wednesday, April 01, 2015
TIME: 3:30 p.m.
LOCATION: P. Delaney Gallery, Bethune College