CHINA CROSSROADS

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Mysteries of the Universe:
Recent and Future Developments
in Radio Astronomy

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There are many things we don't know about the Universe, but the biggest mysteries in astronomy might not be what you think. I will explain a few of the big mysteries that astronomers are working on right now. I'll talk about how we're using the newest telescopes to solve these mysteries and I'll share the upcoming technological advancements that might hold the key.

Laura Driessen is a radio astronomer using world-leading telescope facilities to search for and investigate stars that emit radio light. Using ASKAP, CSIRO's Australian SKA Pathfinder in Western Australia, her team has more than doubled the known number of radio stars. If a star emits radio light, that means that it emits X-ray flares and big bursts of plasma. Any planet orbiting the star would be bombarded with radiation, which isn't a good thing for life. So, when we search for habitable planets, we want to avoid radio stars. However, we don't have a good idea of exactly which stars are radio stars, so we don't know if we're searching for life in the right places. She is currently a postdoctoral researcher at the Sydney Institute for Astronomy at the University of Sydney. She previously worked for the CSIRO Space & Astronomy Department in Western Australia. She received her PhD from the University of Manchester, Masters of Astronomy & Astrophysics from the University of Amsterdam, and Bachelors of Science from Monash University.

<u>China Crossroads</u> hosts talks on all topics related to China, including business, foreign policy, and other areas as they relate to China, the idea being that China is both already a "crossroads" of the world and itself at a "crossroads" in terms of its future global influence. For more information, contact Frank Tsai at <u>editor@shanghai-review.org</u>.