

"A Planetary Neighbor" Excerpt Transcript

Excerpt from (<u>August 26, 2016</u>) episode of Science Friday.

IRA FLATOW	 This is "Science Friday." I'm Ira Flatow. Now for a little story. Once upon a time, the only planets we knew about were the ones in our own solar system. But as telescopes and techniques improved, we began to realize that there are plenty of planets to go around, that a solar system having planets may be the rule, not the exception. And in recent years, spurred on by even better instruments and improved hunting methods, astronomers are logging an increasing list of planets that could be sort of like home. The right general size, the right distance from their star, the Goldilocks zone. Well, this week astronomers announced the discovery of an intriguing new neighbor, and here to talk about that is Rachel Feltman, editor of the Washington Post Speaking of Science blog. Always good to see you around, Rachel.
RACHEL FELTMAN	Good to see you too, Ira.
FLATOW	Hope I didn't scare you away with that bedtime story.
FELTMAN	No, not at all.
FLATOW	Well, let's talk about the discovery this week of this new exoplanet that could be sort of like Earth?
FELTMAN	It could be sort of, but let's not get ahead of ourselves. It's called Proxima B and it orbits Proxima Centauri, which is our closest star. It's a tiny little cool red dwarf about 4.25 light years away, which relatively speaking, is a stone's throw. It could potentially be Earth-like, but there are a lot of things we don't know about this planet. In fact, all we do know about it is that it very likely exists. We know that it could be rocky, based on how far it is from its star and what we know about the planets that form around red dwarf stars. We know that it could be in the star's habitable zone.



	But without an atmosphere, its temperature is around minus 40 degrees Fahrenheit. It's only within atmosphere that it would have temperatures similar to Earth. So there are all these ifs. If it's actually rocky
FLATOW	You're spoiling the story, Rachel.
FELTMAN	But it's still really cool, because it's so close by. And it's becoming increasingly clear that there are probably planets around most stars. And even these red dwarf stars that were so neglected are good places to look for life.
FLATOW	This got a lot of press this week
FELTMAN	Right.
FLATOW	or of ink, as we used to say in the business. Yeah. Rachel, always fascinating.
FELTMAN	Thank you.
FLATOW	Thanks for dropping by. Rachel Feltman
FELTMAN	Thanks for having me.
FLATOW	you're welcome is editor of the Washington Post Speaking of Science blog.