



Contribution ID: 471

Type: Oral Presentation

## PUBLIC TALK: Exploring the Universe - The Search for Signs of Life

Thursday, 2 July 2015 19:00 (1 hour)

**Abstract content** <br> &nbsp; (Max 300 words)<br><a href="http://events.saip.org.za/getFile.py/a" target="\_blank">Formatting &<br>Special chars</a>

Are we alone? For centuries humans have looked up at the night sky and wondered if there was another world like our planet out there. The sixteenth century Italian philosopher Giordano Bruno speculated that there could be multiple worlds like our own out there. But it was not until the first discovery in 1992 of two exoplanets orbiting a Pulsar that we had definitive evidence of planets outside of our own solar system. In 1995 the first exoplanets orbiting a main sequence star, 51 Pegasi, were announced providing further evidence of planets orbiting stars outside of our own solar system.

Finding planets outside of our own solar system, especially those orbiting within the so-called habitable zone of their parent star, raises the intriguing possibility that life may have evolved elsewhere. Recent developments in the study of our own solar system raises important questions about our model of where life may have the chance to evolve, with tantalizing evidence of liquid water and organic molecules present on some of the moons of Jupiter and Saturn.

This talk will detail the results in our quest for understanding where one might look for signs of life, both within our solar system and beyond.

**Primary author:** Dr VAN ZYL, Jakob (Jet Propulsion Laboratory, Cal. Inst. of Technology)

**Presenter:** Dr VAN ZYL, Jakob (Jet Propulsion Laboratory, Cal. Inst. of Technology)

**Session Classification:** Plenary

**Track Classification:** Track H - Plenaries