



## **Scott M. Ransom**

Astronomer

National Radio Astronomy Observatory / Univ. of Virginia

Scott is a tenured astronomer with the National Radio Astronomy Observatory (NRAO) in Charlottesville, VA where he studies all things “pulsar”. He is also a Research Professor with the Astronomy Department at the University of Virginia where he has several graduate students and teaches the occasional graduate class. He works on a wide variety of projects involving finding, timing, and exploiting pulsars of various types, using data from many different instruments and at energies from radio waves to gamma-rays. His main focus is on searching for exotic pulsar systems, such as millisecond pulsars and binaries. Once these pulsars are identified, he uses them as tools to probe a variety of basic physics, including tests of general relativity, the emission (and hopefully soon the direct detection) of gravitational waves (as part of the NANOGrav collaboration), and the physics of matter at supra-nuclear densities. Much of his time is spent working on the state-of-the-art signal-processing instrumentation, high-performance computing and software that pulsar astronomy requires.

Scott was awarded a Hertz Foundation Fellowship for a PhD while in his last year as a cadet at West Point. He completed a Master's degree in Astronomy at Harvard and then entered active duty in the US Army as a Field Artillery officer. After almost six years of service, he returned to Harvard and completed his PhD thesis on “New Search Techniques for Binary Pulsars” in 2001. After his PhD, he was a Tomlinson post-doctoral fellow at McGill University in Montreal, Canada until 2004 where he moved to NRAO as a staff astronomer. In 2006 he won the Bart J. Bok prize which is awarded for “distinguished research by a Harvard Astronomy Ph.D. recipient under age 35”, and in 2010 he won the American Astronomical Society's Helen B. Warner Prize “for a significant contribution to observational or theoretical astronomy during the five years preceding the award.” He is a Fellow of the American Physical Society, a Senior Fellow of the Canadian Institute for Advanced Research, and has authored or co-authored over 200 refereed publications, including 17 in *Nature* or *Science*.

When he isn't working on pulsar astronomy, Scott is either tweaking one of his many Linux systems, running, hiking, hanging out with his (mostly grown!) kids, or preferably, rock climbing.