

LISTEN LIVE



KUHT TV 8
Passport

Find out how to access full
shows and extended content >>



Houston
Public Media



PBS

THIS IS WHY
YOUR GIFT MATTERS.

Watch videos >>>

NEWS

Rice University: New Tech Could Send WiFi Over TV Signals

Engineers report they have created a new technology that allows wireless data to be transmitted together with television programming over UHF signals.

FERNANDO RAMIREZ | JULY 14, 2015, 12:43 PM (LAST UPDATED: SEPTEMBER 8, 2015, 5:48 PM)

[UHF signals, or Ultra High Frequency signals](#), are typically used to transmit television broadcasts. They have fallen out of favor as consumers switch to cable and satellite to view television. Currently, [less than 10%](#) of the population watches television through these underutilized frequencies.

In 2010, [the FCC](#) made a ruling that if a UHF frequency is not being used for a broadcast transmission, then it could be repurposed to transmit wireless data instead. UHF WiFi hotspots can stretch for miles in every direction and are commonly referred to as “Super WiFi.” Unfortunately, there aren’t many unused UHF frequencies lying around.

Rice University professor Edward Knight says he removed the “either/or” factor when it comes to these precious UHF signals. Knight says he’s created a system that blocks out WiFi signals from interfering with watching UHF programming on a TV. In other words: UHF signals could simultaneously be used to carry data and television programming.

The technology is called WATCH, or Wi-Fi in Active TV Channels.

“Our tests showed that WATCH could provide at least six times more wireless data compared with situations where we were limited only to the traditionally available white-space spectrum,” [Knightly said](#).

The researcher says that the finding is important as more and more consumers turn to the Internet for information and are streaming videos for entertainment.

“There are already more people in the United States who require mobile data services than there are people using broadcast-only TV,” Knightly said. “By showing that these two communities can coexist, we hope to spur innovation and a public debate about how this valuable resource could be used.”

Rice University recently made the findings public. It's unclear when consumers can start surfing the Internet on television waves.

Share



Houston Public Media

A SERVICE OF THE **UNIVERSITY OF HOUSTON**



[News](#) [Arts & Culture](#) [Education](#) [TV 8](#) [News 88.7](#) [Classical](#) [About](#) [Contact Us](#) [FCC Station Info](#)

Houston Public Media is supported with your gifts to the Houston Public Media Foundation and is licensed to the [University of Houston](#)

Copyright © 2018 | [Privacy Policy](#)
