

Invisible wireless networks brought to life as stunning 'spectres'

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Invisible wireless networks brought to life by Newcastle University student Luis Hernan

Invisible wireless networks are transformed into beautiful beams of colour in a series of photographs.

The images, created by Newcastle University researcher Luis Hernan, show the 'spectres' of [wireless networks](#) sweeping, swirling and swooping around a ghostly figure.

They were produced as part of Luis's Digital Ethereal project, which aims to bring the invisible world around us to life.

Luis Hernan, who is studying for a PhD in Architecture and Interaction Design, became fascinated with the idea of being able to see the hidden wireless networks which surround us.

"I call the images 'spectres' because wireless networks remind me of ghosts," he said. "They are there but you can't see them with the human eye.

"The fact we are becoming increasingly reliant on something that we can't see intrigues me. I wanted to find a way to show the wireless which is around us and also to show how it changes. It is an impossibly fragile and volatile infrastructure that holds our digital technologies together, and shapes the way in which we interact with the digital world. Something as seemingly inconsequential as walking around the house will interfere with and reshape their propagation and strength field. Close the wrong door, and the bedroom becomes a dead spot for wireless."



Wireless networks near Newcastle University's Architecture building revealed

Luis created the photographs by a Kirlian Device, an instrument specially designed by him to reveal the qualities of wireless networks. The instrument scans continuously for wireless networks, and transforms the signal strength to colour LEDs. Then, using the device in different places, his movements were captured using long exposure photography. The results are multi-coloured streaks of light which twirl and wrap in spaces, showing how we are surrounded without even realising we are.

Luis has also created a Kirlian Device app which can be downloaded for free for Android devices.



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He said: "I would love other people to get involved and to create their own images using the app. I used it as part of an exhibition of my work, where we hung mobile phones from the ceiling and it showed how [signal strength](#) was varying as people moved around the room.



Wireless networks revealed in a home

Provided by Newcastle University

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