

First-ever colour X-ray on a human

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New Zealand scientists have performed the first-ever 3-D, colour X-ray on a human, using a technique that promises to improve the field of medical diagnostics, said Europe's CERN physics lab which contributed imaging technology.



The new device, based on the traditional black-and-white X-ray, incorporates particle-tracking <u>technology</u> developed for CERN's Large Hadron Collider, which in 2012 discovered the elusive Higgs Boson particle.

"This colour X-ray imaging technique could produce clearer and more accurate pictures and help doctors give their patients more accurate diagnoses," said a CERN statement.

The CERN technology, dubbed Medipix, works like a camera detecting and counting individual sub-atomic particles as they collide with pixels while its shutter is open.

This allows for high-resolution, high-contrast pictures.

The machine's "small pixels and accurate energy resolution meant that this new imaging tool is able to get <u>images</u> that no other imaging tool can achieve," said developer Phil Butler of the University of Canterbury.

According to the CERN, the images very clearly show the difference between bone, muscle and cartilage, but also the position and size of cancerous tumours, for example.

The technology is being commercialised by New Zealand company MARS Bioimaging, linked to the universities of Otago and Canterbury which helped develop it.

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