

Re: MRI Machines

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- *From:* Spehro Pefhany <speffSNIP@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Wed, 25 Jun 2008 08:58:36 -0400
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On Tue, 24 Jun 2008 17:33:34 -0700, John Larkin
<jjlarkin@xx> wrote:

On Tue, 24 Jun 2008 19:30:42 -0400, RFI-EMI-GUY
<Rhyolite@xxxxxxxxxxxxx> wrote:

Jim Thompson wrote:

On Tue, 24 Jun 2008 11:34:07 -0700, John Larkin
<jjlarkin@xx> wrote:

On Tue, 24 Jun 2008 13:28:46 -0400,
RFI-EMI-GUY
<Rhyolite@xxxxxxxxxxxxx> wrote:

Well I spent a half hour of
my life under the magnet of
an "open" MRI
machine yesterday. Still a
bit claustrophobic. While I
sort of
understand the theory of the
MRI, what I don't
understand is what
creates all the noise and
racket. Any experts out
there that can tell me
whats going on?

Pulsed gradient coils. These are "small"
3-axis coils that sweep a
gradient field across your innards,
modulating the nuclear resonant
frequencies of your molecules to produce the
spatial resolution. These

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are generally water-cooled, with ballpark 20
KW constant-current
drivers per axis, playing all sorts of weird
waveforms.

They scanned my head last year, with the
gradient coils around my head
like some horror mask: noisy and boring.

John

A few years ago they scanned my sinuses.

I must admit a claustrophobic feeling also :-(

...Jim Thompson

I told the tech to give me a time check every so often so I wouldn't
lose my mind, then I worked out a design problem in my head for 30
minutes as a distraction. I can put up with a lot of stuff but being
inside or under that thing creeps me out. I keep having visions of
oxygen cylinders getting sucked through the drywall and crushing me or
the magnet quenching and getting burned in a puff of steam.

What an absurd fear. It quenches, a lot of cold helium blows out, the
O2 in the room is displaced, and you die painlessly of asphyxiation.

John

There are a number interesting modes of dying involving cryostats.

Best regards,
Spehro Pefhany

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"it's the network..." "The Journey is the reward"

speff@xxxxxxxxxxxxx Info for manufacturers: <http://www.trexon.com>

Embedded software/hardware/analog Info for designers: <http://www.speff.com>

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