

# Opening Beer Bottles with SDR

Martin Braun

GNU Radio Conference 2015

# Background

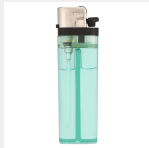
- PhD story...

# Background

- Actually, don't believe anything this guy says

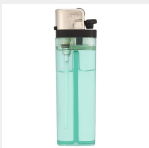
# Bottle Opening & Radio: A History

- Before radios: Lighters



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- The indestructible: Nokia 3510



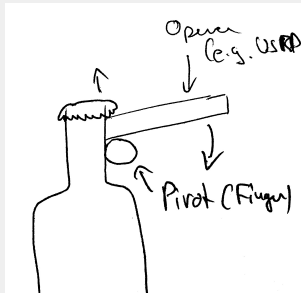
# SDR: The end of radio-based BBO?

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- How can we do this with software?
- Enter Matt Ettus, and BBO-comptible hardware
- USRP1, USRP2 came in solid case
- Most future devices worked fine as well

# The Physics of BBO



- Use: USRP, yardstick, piece of paper. . .



# Random Knowledge Bombs

- Careful with raw PCBs (in particular, baluns and other big discrete components, bending boards)
- Don't use USB or SMA connectors
- BBO'ing can scratch paint (might be a plus though)
- Non-alcoholic beverages may be opened, but you may be laughed at
- OctoClock: Use angle brackets!

# Summary

- USRPs great for BBO (both professional and hobbyist)
- Personal favourites: E310 and B200mini
- Open question: Can we use RFNoC?