

# Panel: Enabling Technologies and Standards for Spectrum Forensics

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The logo for Spectrum Forensics. It features the words 'SPECTRUM' and 'FORENSICS' in a bold, serif font. The text is overlaid on a stylized fingerprint graphic. The fingerprint is composed of numerous colorful lines (red, green, blue, yellow, purple) that form the ridges and valleys of the fingerprint, resembling a circuit board or a network diagram. The background is a light blue gradient.

**SPECTRUM**  
**FORENSICS**

## Forensic science

- The application of scientific principles and technological practices to the purposes of justice in the study and resolution of criminal, civil, and regulation issues (American Academy of Forensic Sciences, <http://www.aafs.org>)

## Spectrum forensics

- Spectrum measurements that support interference monitoring, investigation, and enforcement
- The gathering of information by a trusted agent, using rigorous, repeatable, scientific engineering methods, to inform an enforcement action



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# What *technologies* can address the challenges of enforcement?

- Intermittent, bursty interferers
- Mobile interferers
- Multipath and its effect on direction-finding
- Direction-finding on frequencies with multiple signals
- Automating the monitoring process
- Improving sensitivity
- Classifying digital signals

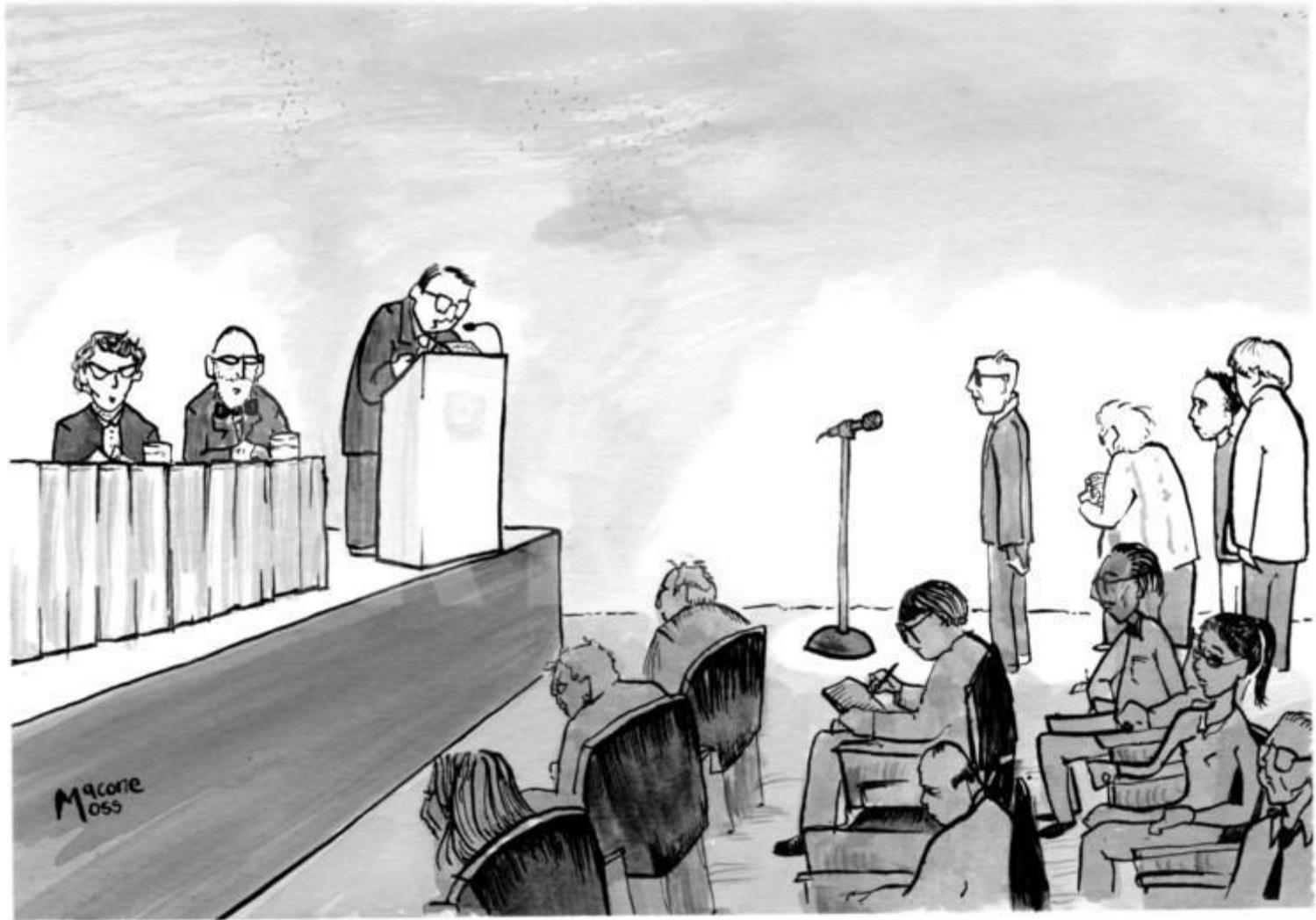
# How do we *standardize* collection gathering?

- Framework
- Metrics
- Best practices



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*"We'd now like to open the floor to shorter speeches disguised as questions."*

# Discussion

- Dedicated vs. embedded sensors
- Software-defined vs. software-controlled sensors
- What should go on the cloud, and what should stay at the sensor?
- Feedback to policy-makers? the other panels?

# Demos

- Rohde & Schwarz
- Great Scott Gadgets
- DARPA Radio Map
- University of Colorado Drones
- Cognitive Systems Corp.
- iPosi
- CAC Spectrum Monitoring
- CRC Spectrum Monitoring



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