

## EACP Committee

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**From:** Debra Greene <debra@DebraGreene.com>  
**Sent:** Tuesday, July 07, 2020 7:12 AM  
**To:** EACP Committee  
**Cc:** Kasie M. Takayama  
**Subject:** PDF of Slide Deck  
**Attachments:** EACP 5G Enviro Effects Panel Debra Greene.pdf

Aloha,

Attached please find my slide deck for today's presentation in PDF. Please let me know you received this. Thanks!  
Looking forward to the meeting.

Sincerely,

Debra

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Debra Greene, PhD  
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Sent from my faster, safer, more secure HARDWIRED computer

# **5G**

# **Environmental Effects**

Debra Greene, PhD

[www.KeepYourPower.org](http://www.KeepYourPower.org)



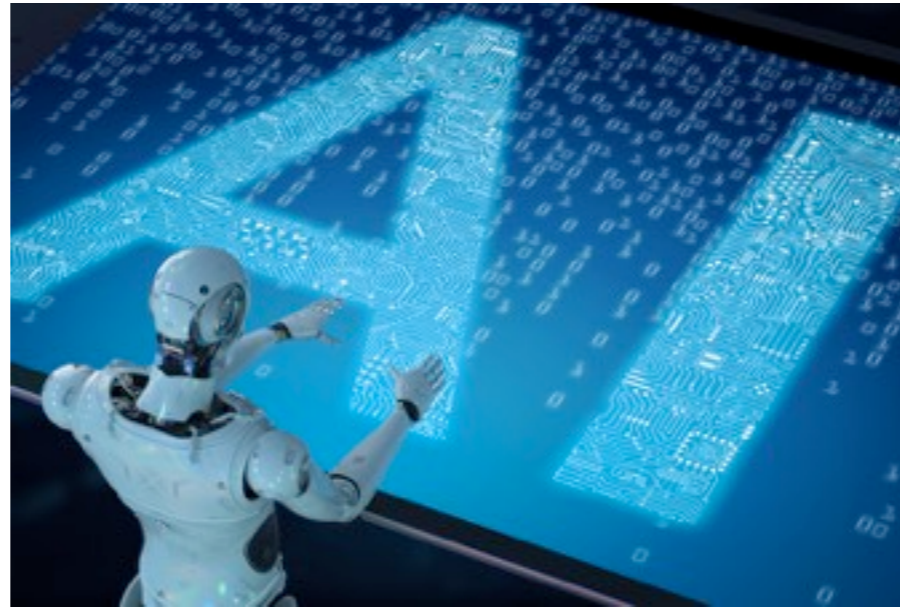
# What is 5G?

- Marketing Term
- 5th Generation
- Not 5 GHz wifi (5G = 10 - 300 GHz)
- Many Gs
- 4G (LTE)
- Microwave frequency

5G



# Should be called 5G/AI/IoT





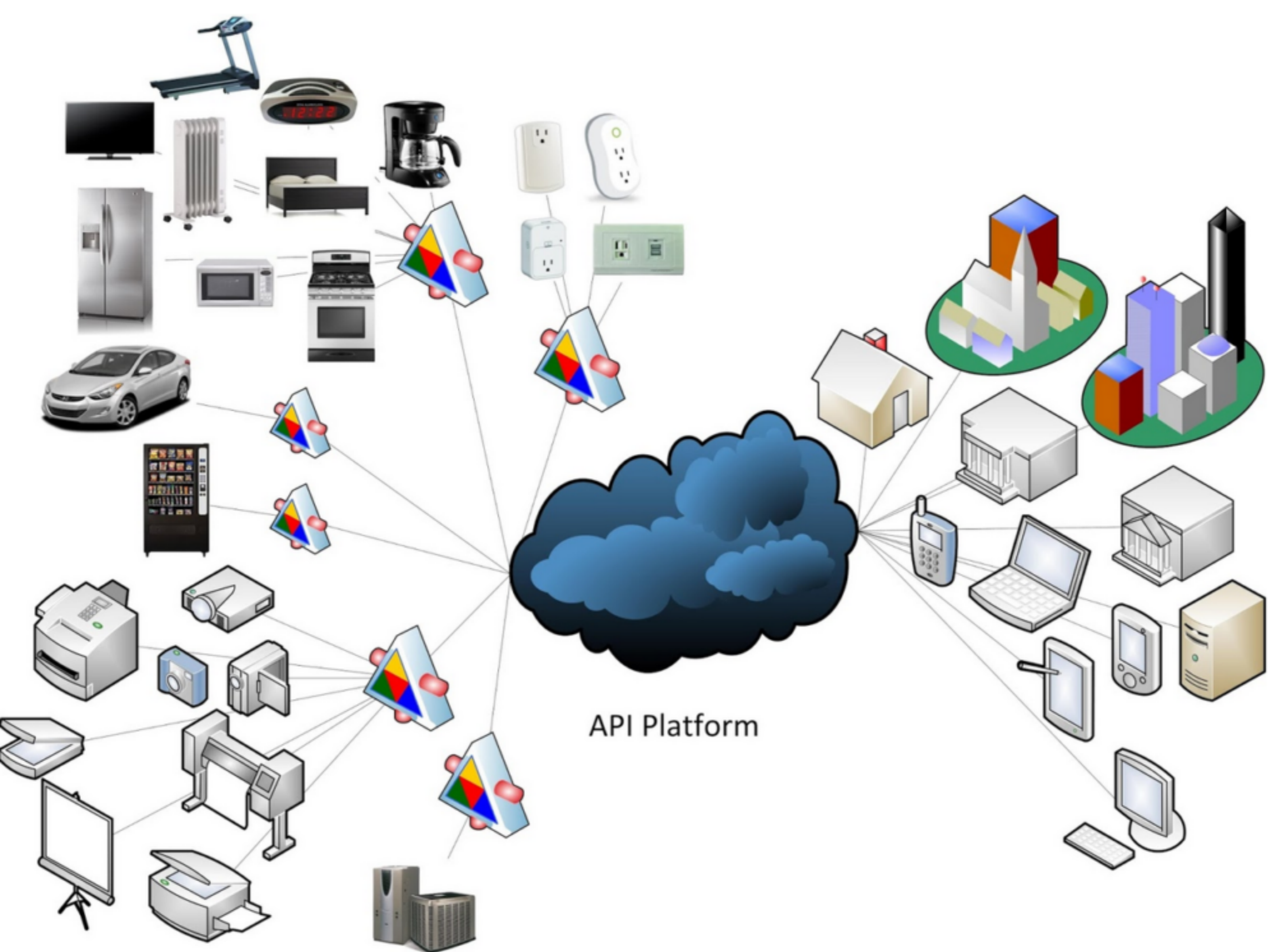
# What is 5G?

- Faster downloads & lower latency
- Adds to - Does Not Replace - 4G (LTE)
- Low, mid & high band - **millimeter waves**
- Antennas installed every 2-10 homes
- As close as 15 feet to your home
- 45,000+ new satellites low / mid orbit















# What is 5G?

- 5G Base Stations & Devices
  - Multiple antennas in phased arrays
  - Steerable laser-like beams track each other
- Each 5G phone = Mini cell tower
  - Dozens of tiny antennas
  - Track and aim narrowly focused beams
  - Search and connect to nearest antennas
- FCC rules - 20 watts, 10x more powerful
- Radiation ten to hundreds of times greater



# What is 5G?

- Many complex factors involved
  - Frequencies
  - Power
  - Modulation
  - Field polarization
  - Pulsation
  - Synergistic effects
  - Exposure time
  - Prolonged exposures





**Wireless carriers admit: No scientific studies on safety of 5G and no plans to do any**





**Burt Lum** ✓

@Bytemarks

Follow



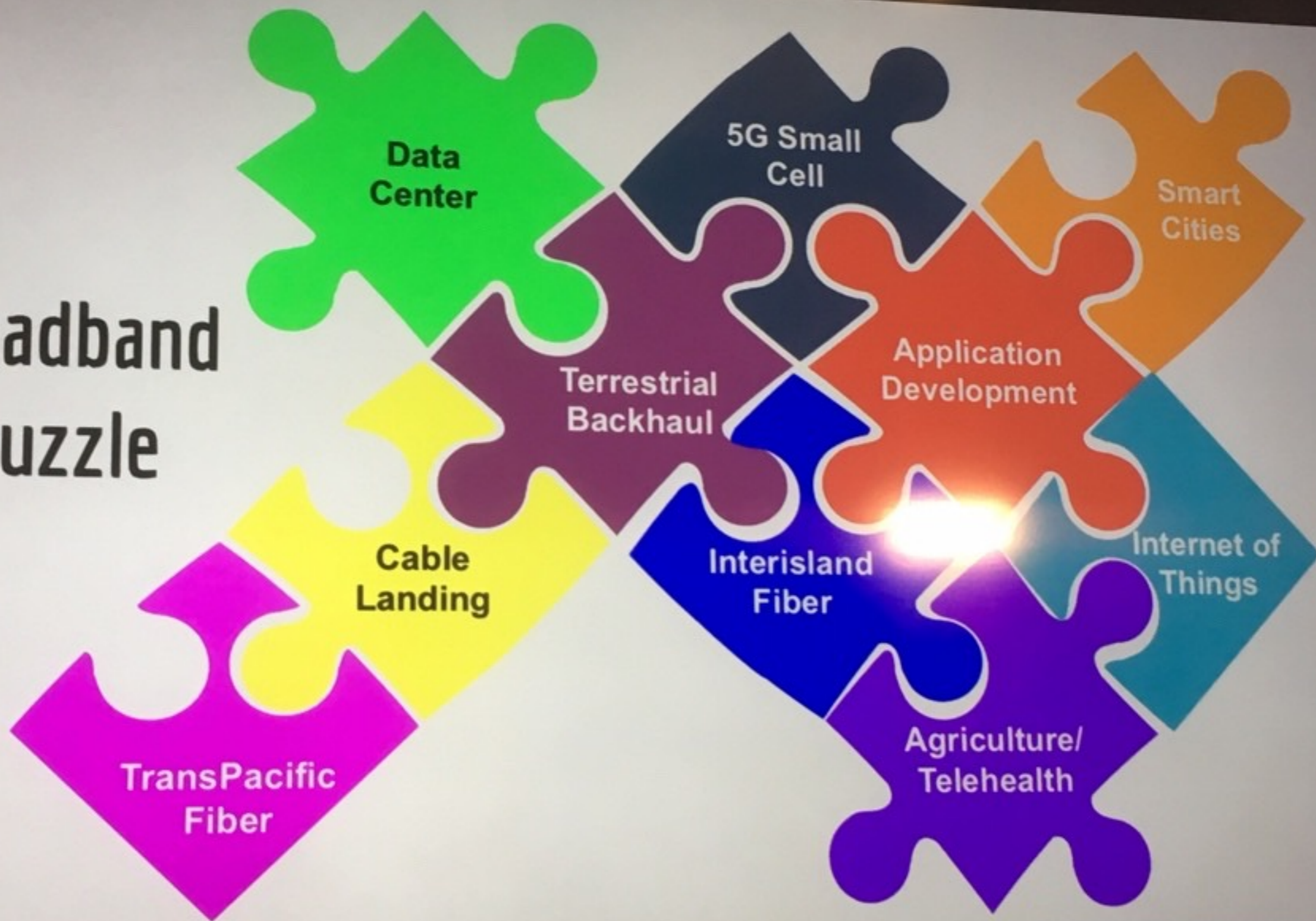
This was a tough crowd. A couple people waved and smiled but most of them want to run me out of town. @akakutv All because of 5G! I barely survived. [bit.ly/2MNQYHZ](https://bit.ly/2MNQYHZ)



2:40 AM - 14 Jun 2019



# Broadband Puzzle







# 15 5G installations in Maui County



T-Mobile



# **HARM TO THE ENVIRONMENT**



# WIRELESS RADIATION HAS BEEN LINKED TO DAMAGE TO:

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- Ants
- Birds
- Trees
- Frogs
- Fruit Flies
- Bees
- Insects
- Mammals
- Mice
- Plants
- Rats
- Forests



# Harm to Wildlife

- Exposure of Insects to 2-120 GHz, Thielen, 2018: Insects absorbed 3-370% more more radiation with higher frequencies of 5G
- Research Review, Manville, 2019: Amassed over 500 scientific, peer-reviewed papers showing impacts of non-ionizing, non-thermal radiation on lab animals and wildlife
- EMFs are Emerging Threat to to Wildlife Orientation, Balmori: EMF interferes with magno-reception disrupting bird and insect orientation



# Harm to Wildlife

- EKLIPSE Report, EU: 97 studies showed risk to bird and insect orientation and plant health.
- Review Research, Cucrachi, 2013: Of 113 studies 70% show negative effects. Development and reproduction of birds and insects are most affected.





# **BEEES, BIRDS AND MANKIND**

## **Destroying Nature by 'Electrosmog'**

**Ulrich Warnke**

**Effects of Wireless Communication Technologies**

**A Brochure Series by the  
Competence Initiative for the Protection of Humanity,  
Environment and Democracy**



# WIRELESS RADIATION

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## HARM TO BEES:

- Colony Collapse Disorder
- Solar and magnetic navigation disruption
- Reduced immunity
- Biochemical changes
- Induced worker piping signal
- Changes in behavior and biology
- Decline in colony strength
- Decline in egg laying
- Decrease in beehive weight
- Decrease flight return



# WIRELESS RADIATION

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## HARM TO BIRDS:

- Disruption to magnetic compass orientation
- Reproductive harm
- Lack of singing
- Biochemical changes
- Developmental impairments



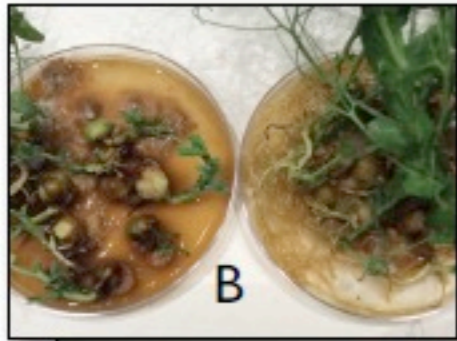
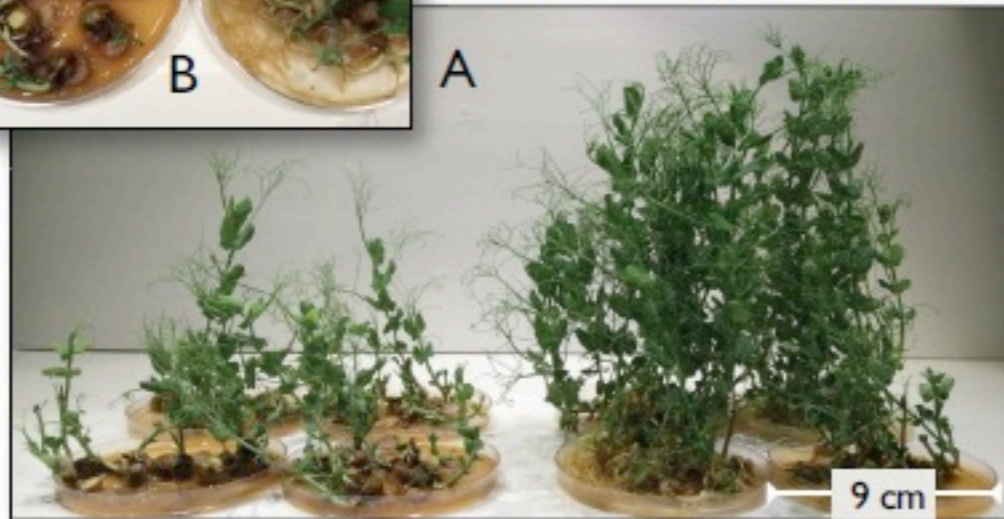


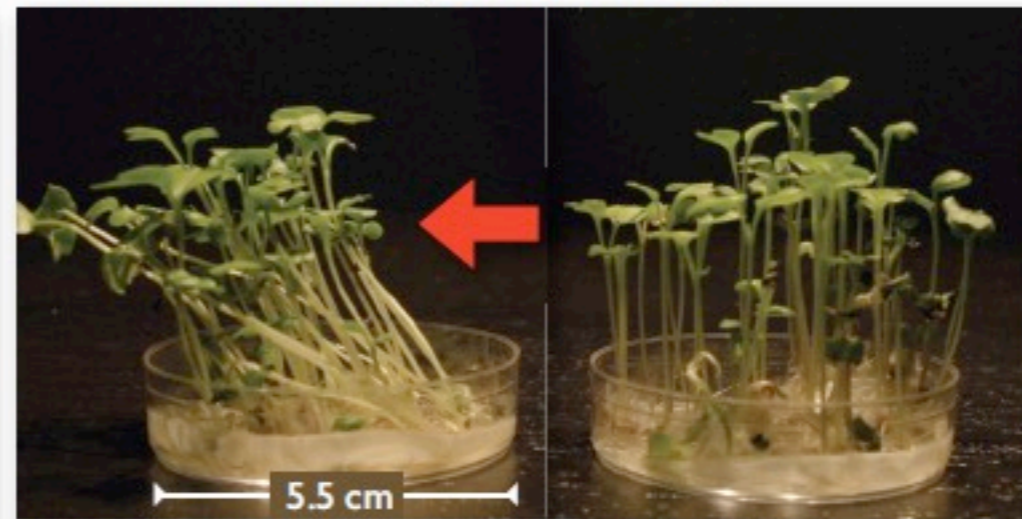
Plate 1: Pea (*Pisum sativum*)



Wi-Fi

Reference

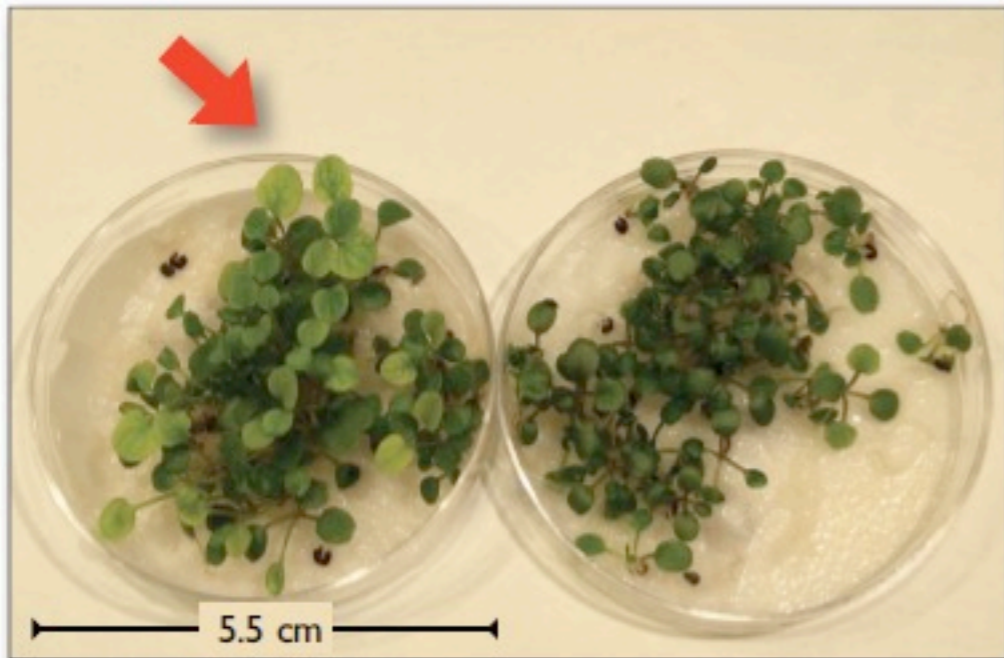
Plate 2: Broccoli (*Brassica oleracea*)



Wi-Fi

Reference

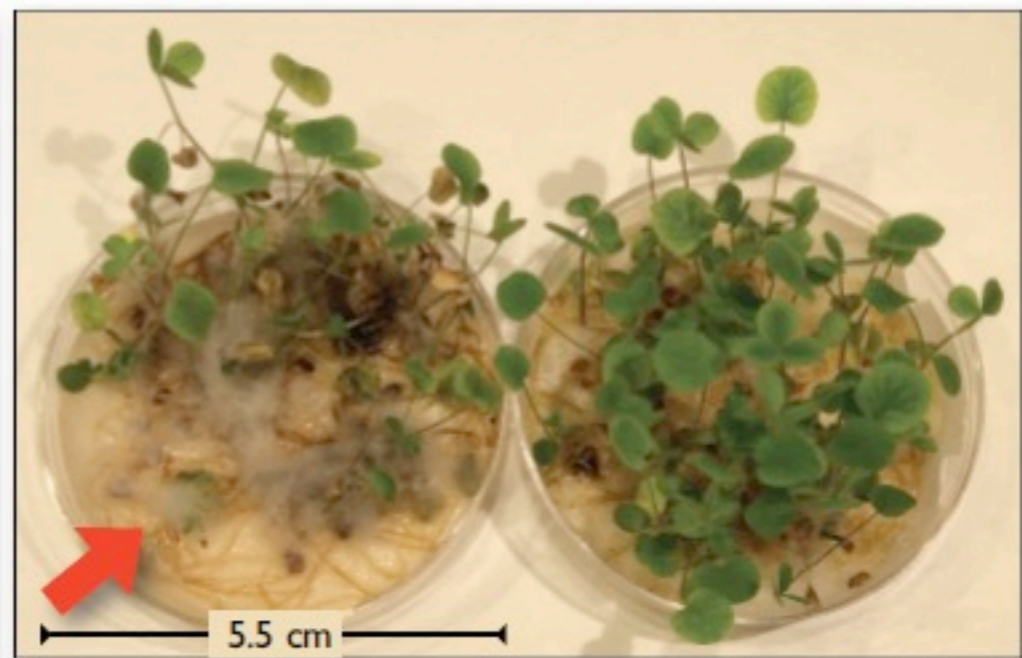
Plate 3: Garden Cress (*Lepidium sativum*)



Wi-Fi

Reference

Plate 4: Red Clover (*Trifolium pratense*)



Wi-Fi

Reference





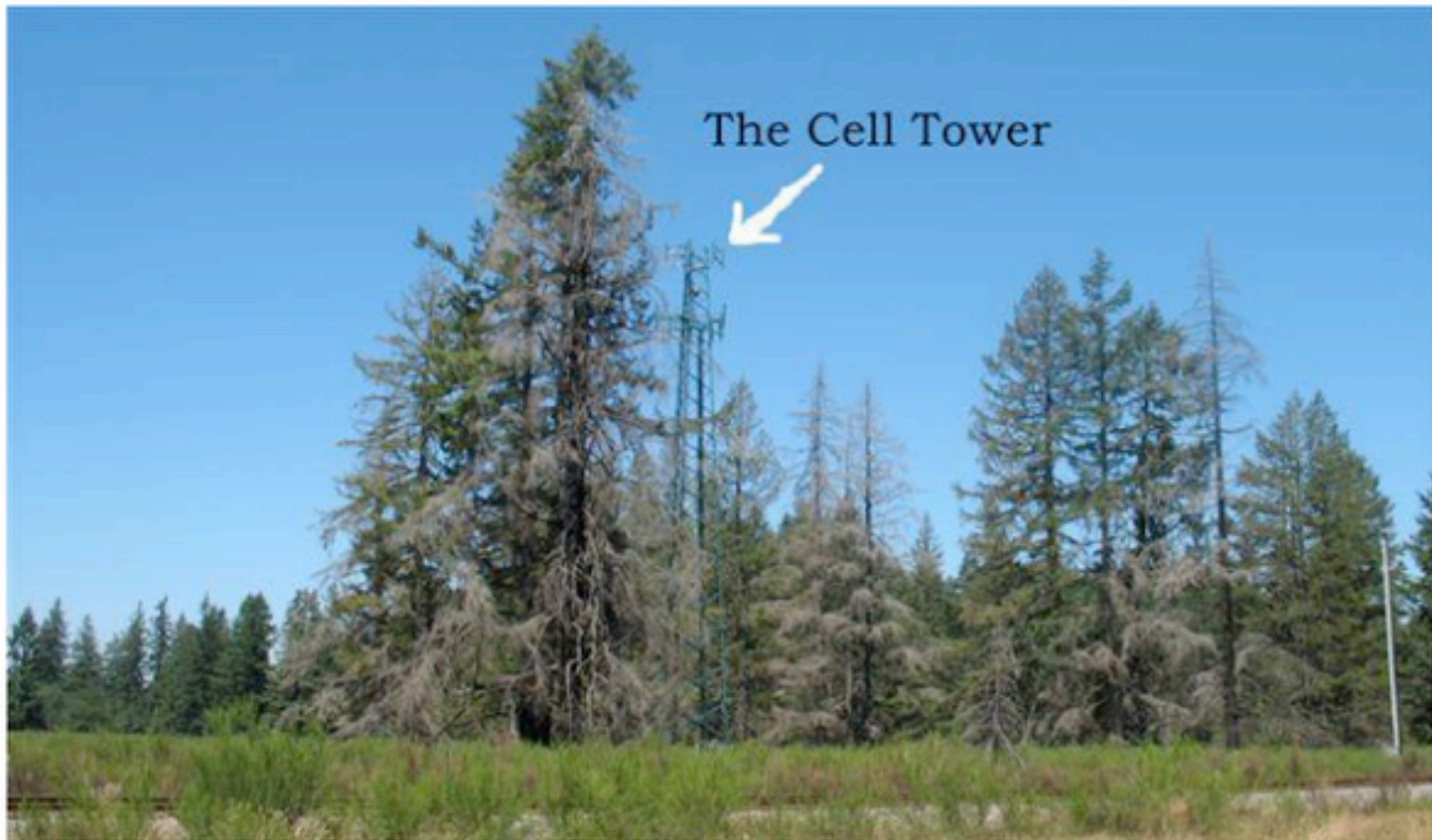
*Wi-Fi*

30 days

Reference



Trees can be considered humankind's 'breathalyzers'. Countless forests are being damaged horribly by cell towers [2] and their emissions causing radiation poisoning to leaves. [See this.](#)







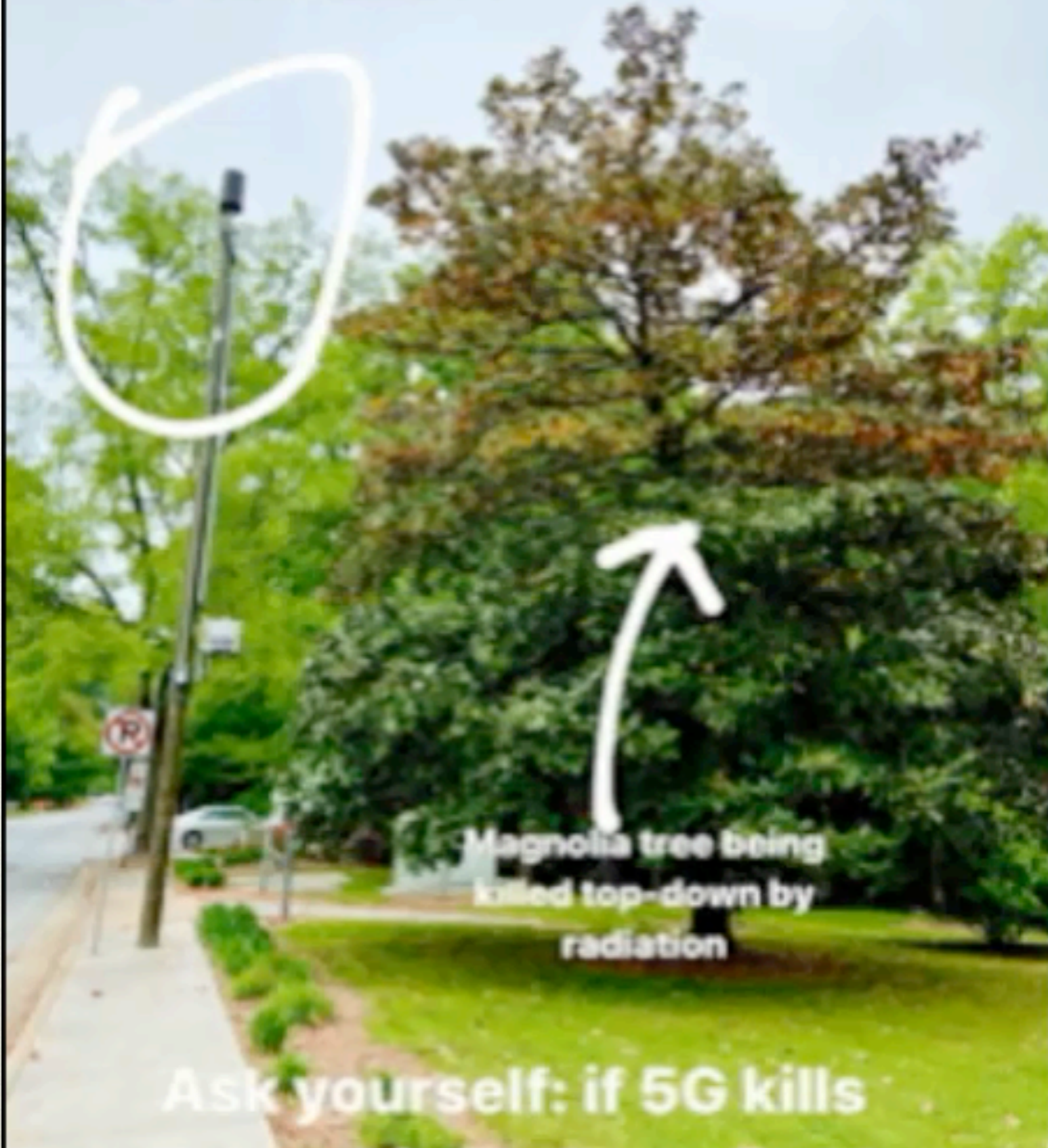
**5G  
Tower**



**I took this in Atlanta a**

**few days ago. Antenna  
has only been there for a**

**5G antenna**      **few months.**



**Magnolia tree being  
killed top-down by  
radiation**

**Ask yourself: if 5G kills**

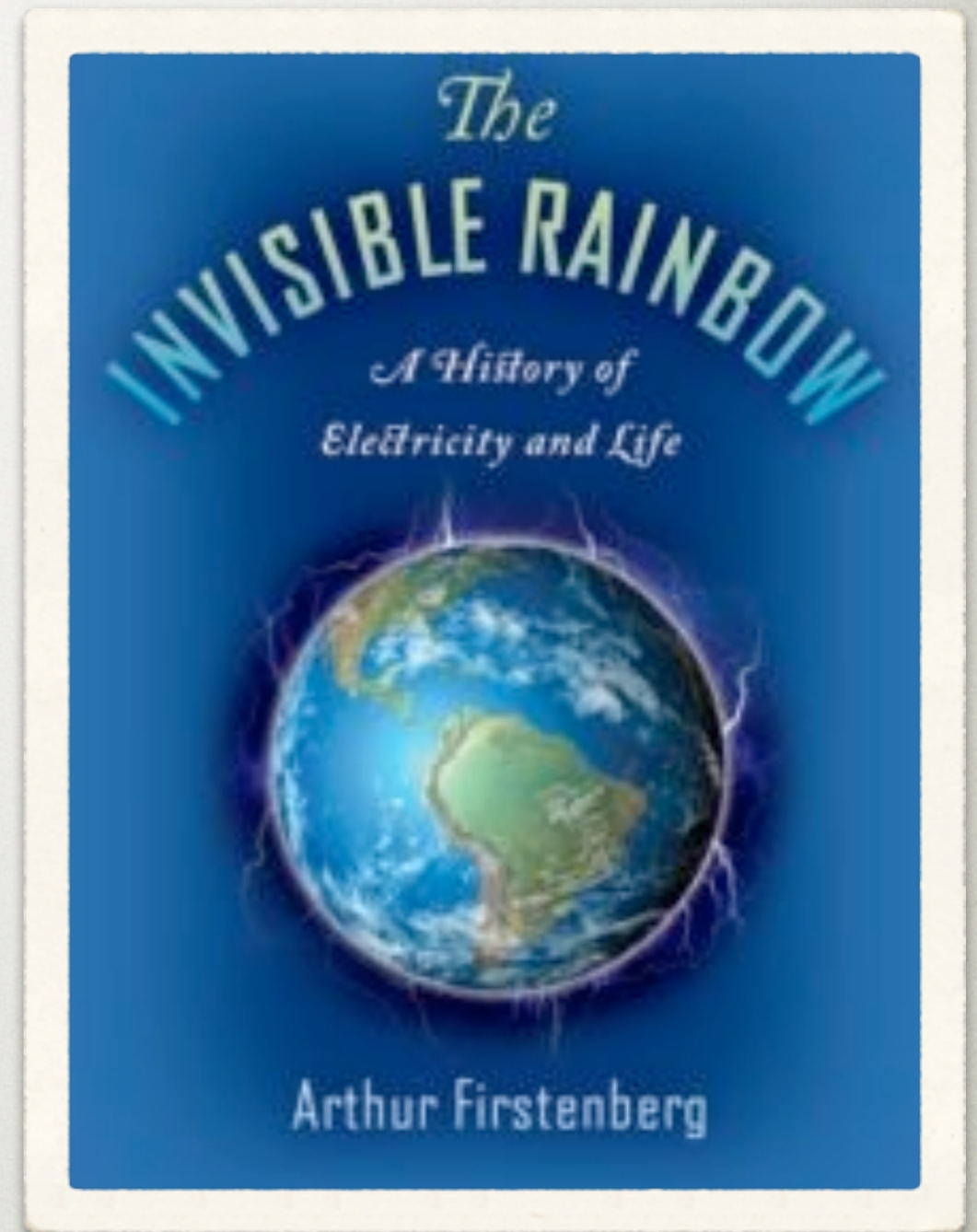


Arthur Firstenberg

Traces electricity rise & harms to humans, plants, animals, insects

**Wireless radiation damages the ionosphere.**

“The safe level of exposure to radio waves is zero.”

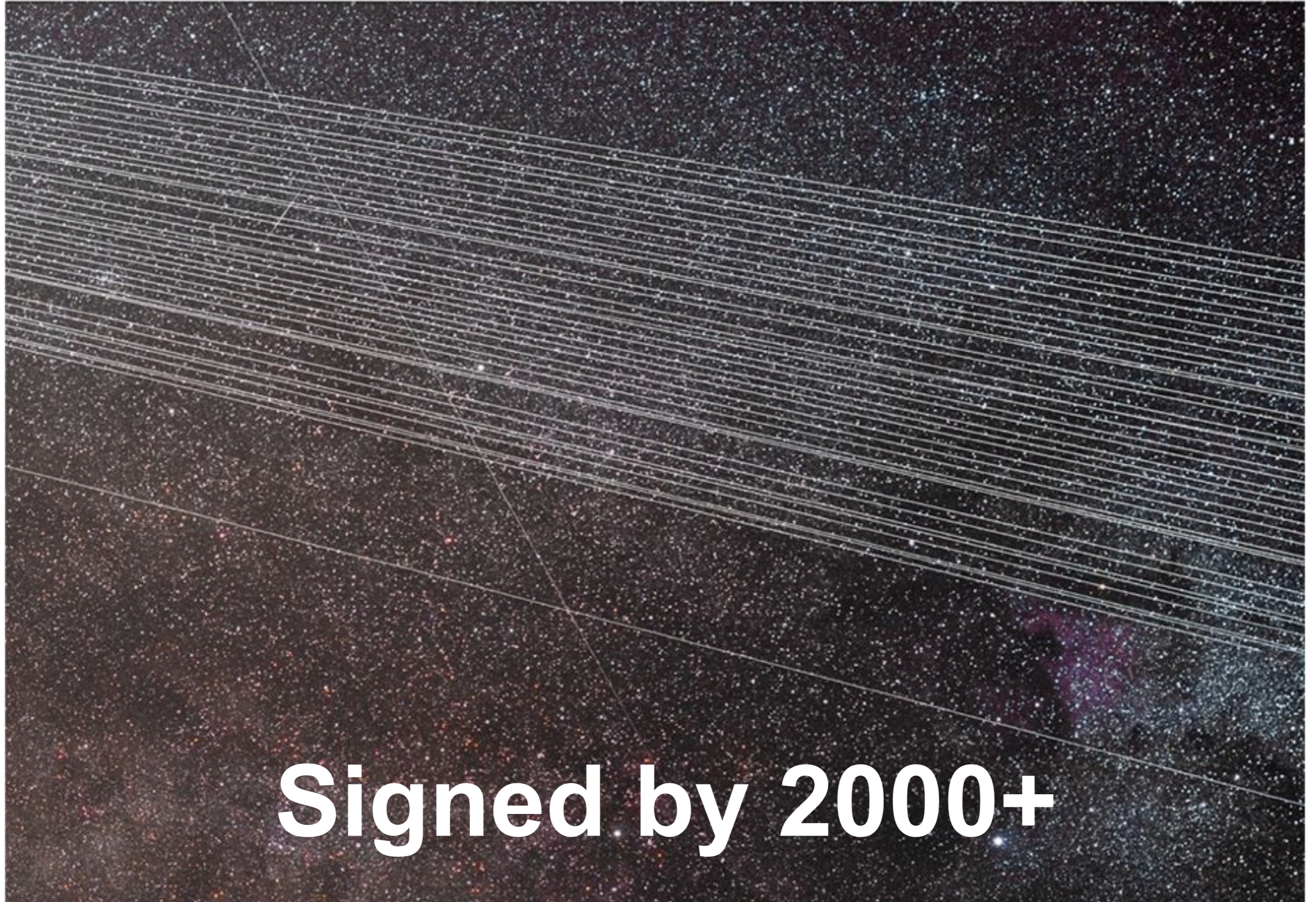




# **5G INTERFERENCE IN ASTRONOMY**



# Appeal by Astronomers



**Signed by 2000+**



# **5G INTERFERENCE IN WEATHER FORECASTING**



# 5G Interference

- 5G frequencies could contaminate weather satellites
- 23.8 GHz = wavelength of water vapor
- 36-37 GHz band used to study rain and snow
- 50 GHz band - atmospheric temperature
- 86-92 GHz band - cloud and ice analysis
- These sections are being auctioned off by FCC and globally



# 5G Interference

- Telecom is ransacking the radio spectrum
- Exploiting frequencies for money
- Regulators are failing to protect natural frequencies
- Vital for Earth observation from space

~ Jordan Gerth, Meteorologist, UW, *Science*



# 5G Interference

- Interrupt delicate satellite instruments
- Impaired forecasts
- Poorer warnings about major storms
- Loss of life





**A Safe Alternative to Harmful 5G Wireless**

**FIBER IS OUR FRIEND!**

**[www.SafeG.net](http://www.SafeG.net)**



# Lawsuits Against FCC: Constitutional Overreach in the Rollout of 5G

- National League of Cities (19,000 cities & towns)
- US Conference of Mayors (1,192 cities)
- National Association of Counties (3,069 counties)
- National Association of Regional Councils (500 councils & metropolitan & regional planning organizations)
- National Association of Towns and Townships (10,000 towns)
- National Association of Telecommunications Officers & Advisers (local government officials)
- Colorado Communications Utility Alliance
- League of Arizona Cities and Towns
- League of California Cities
- League of Oregon Cities
- Michigan Coalition to Protect Public Rights of Way
- Michigan Municipal League
- Michigan Townships Association
- Texas Coalition of Cities for Utility Issues
- 7 Counties
- 45 Cities



# **You Have the Power and Authority to Regulate 5G**

**The Telecom Act of 1996** clearly states that local governments have the power to regulate the placement of wireless facilities.

Here is the exact wording of **47 USC 332 C 7a:**  
**(7) Preservation of local zoning authority**  
**(A) General authority**

*"Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities."*