Level I

1. **World’s Largest Wireless**

Powel Crosley was a madman who was singlehandedly responsible for the largest broadcast radio transmitter in the US. His radio company, World’s Largest Wireless, was no mere hyperbole. At 500kW, his Cincinnati based transmitter’s broadcast range covered most of the continental United States and overpowered stations as far as Toronto, Canada. Those that lived near it could hear the broadcast in their mattress springs and frying pans. Neon lights near it would never go out.



In 1938, after years of complaints, the FCC forced Crosley to downgrade his station to 50kW, a mere 10% of its normal operating power. He lost interest in the project and eventually sold it, because he figured, “If you can’t be the biggest, then what’s even the *point*?” The current largest broadcast radio transmitter is Transmitter Solt, in Hungary, a Cold War remnant of Soviet Russia. At 2MW, its range covers nearly half the globe.

Doppler effect at relativistic speeds

Level II

The polarization of light is used to encode quantum bits (qubits).

Level III