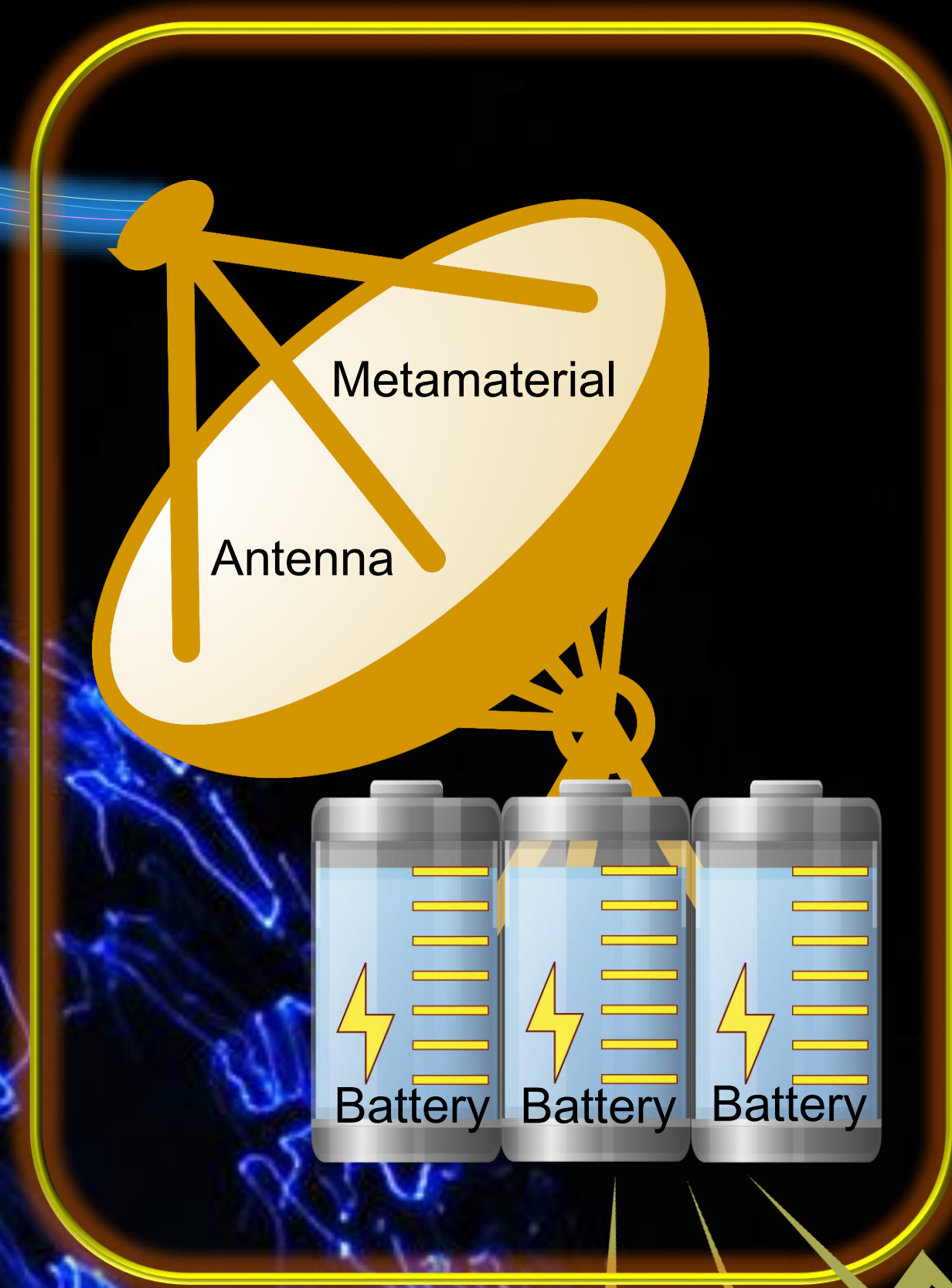


# USING YOUR WIRELESS FOR POWER!

## MOTIVATION

The world's power demands continue to rise and traditional energy sources are being depleted. As more people get access to wireless devices, service providers are trying to spread their signals everywhere. We are surrounded by wireless signals from Wi-Fi, TV stations and Radio Stations. Why don't we make use of wireless signals as an energy source?



## MY RESEARCH

Design of a “**Metamaterial Antenna**” that can capture wireless signals, convert them into power that can be stored or used directly by small devices. As the name suggests, the antenna uses *metamaterials* which are materials with special properties that cannot be found in natural materials.

## THE IMPACT

This device used in applications like consumer electronics and biomedical implants could **reduce cost** by eliminating the cost of battery replacement, handling and disposal, **reduce service downtime** caused by depleted batteries and ultimately result in **reliable devices that power themselves!**