Green RF Sensing & Communications on Shared Radio Spectrum

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Active RF Sensing (AFOSR)
- Sensors send probing signals
- Goal is to detect weak targets in strong interference/clutter

Passive RF Sensing (NSF)
- Sensors are silent, no RF radiation
- Use ambient wireless sources to illuminate the environment
- Green

Cooperative RF Sensing and Wireless Communication (NSF)
- Radar and wireless systems co-exist in same band due to spectrum shortage
- Exploit cooperation to enhance sensing & communication performance

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multiple targets