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### **Ultracold Neutron Sources<sup>1</sup>**

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The free neutron is an excellent laboratory for searches for physics beyond the standard model. Ultracold neutrons (UCN) are free neutrons that can be confined to material, magnetic, and gravitational traps. UCN are compelling for experiments requiring long observation times, high polarization, or low energies. The challenge of experiments has been to create enough UCN to reach the statistical precision required. Production techniques involving neutron interactions with condensed matter systems have resulted in some successes, and new UCN sources are being pursued worldwide to exploit higher UCN densities offered by these techniques. I will review the physics of how the UCN sources work, along with the present status of the world's efforts.

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