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### **Universally slow**

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Glassy systems are very common in nature, from disordered electronic and magnetic systems to window glasses and crumpled paper. Among their key properties are slow relaxations to equilibrium without a typical timescale, and dependence of relaxation on the system's age. After reviewing some of these physical systems, I will describe our approach to the problem, and show how it leads to a novel class of aging. The slow relaxations result from a broad distribution of "relaxation eigenmodes," which relates to a particular class of random matrices. I will discuss recent results on the structure and localization properties of these modes, and their implications.