## Liquid Crystals and Light

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Liquid crystals are anisotropic materials with exceptional responsivity to excitations. Both anisotropy and responsivity originate in the underlying orientational order of the material constituents. Anisotropy makes liquid crystals well suited to controlling light, and their ready response to excitations allows light to modify the material.

In this lecture, I will present simple models of light-matter interactions in these materials, and describe a number of examples illustrating their sometimes predictable and sometimes unexpected consequences.