

## QUANTUM-BASED, MAGNETORECEPTION IN THE BIRD RETINA

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Night-migratory songbirds navigate alone and at night over thousands of kilometers. One of the major cues they use to find their way is the Earth's magnetic field. Biological evidence on many different levels suggest something extraordinary: their magnetic sensing capabilities seems to rely on a light-dependent, quantum mechanical mechanism based on correlated electron spins in a cryptochrome protein. In my presentation, I will summarize the fascinating biological evidence leading to this hypothesis.

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