Seeing the Light – at the End of the Tunnel?

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Seeing the light is no simple task it is accomplished with a complex system consisting of our eyes and brain, which we are only beginning to understand in a rudimentary way. This is certainly good news there is so much interesting science left to do and so many interesting discoveries to make, experimentally and theoretically. We will look at a few examples to illustrate these points, the highly interdisciplinary nature of the problems, and tools needed to begin to unravel them. We will conclude with a description of experiments to probe the transition from randomness to determinism in a simple system, entropy production and random number generation.