**Flavor**: What is a.... Hopfield network?,
by Frederic Koehler

**Ingredients**: The Hopfield network is an extremely simplified model of interacting neurons. They have been studied especially in terms of their ability to memorize patterns when using a simple "Hebbian" learning rule ("neurons that fire together, wire together"). There is an expected phase transition in the ability of the model to memorize random patterns which has been studied by physicists and is probably a very difficult math problem. I will give a high level overview of the Hopfield network and its history, slightly more detailed than this abstract.

**Best Before**: Apr 18th 2019, 6:00–7:00pm at Room 2-132

Please visit [https://math.mit.edu/spams](https://math.mit.edu/spams) for detailed nutrition information for SPAMS.