Landau's idea of classifying phases of matter in terms of symmetry breaking is a cornerstone of modern physics. Can time-translation invariance be spontaneously broken? The possible existence of time-crystals was first addressed by Wilczek for quantum many-body systems launching an intense activity both theoretically and experimentally. Despite their conceptual simplicity and apparent similarity to ordinary crystals, they were experimentally observed only two years ago, eighty years after the Landau theory of symmetry breaking.

I will review the field focusing in particular on the so called Floquet time-crystals arising in many-body systems that are periodically driven. I will also briefly address prospects to observe continuous time-crystals and their relation to quantum synchronisation.

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