Scheduling recurring tasks with frequency requirements

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An instance of the *pinwheel scheduling* problem consists of several recurring tasks, each of which must be performed with a given frequency, i.e., at least once in a certain number of days. We want to devise a (perpetual) schedule for performing the tasks, one per day, while satisfying each task's requisite frequency. In this talk, I will discuss various aspects of this and related problems, including necessary and sufficient conditions for schedulability, and algorithms for finding or optimizing the schedules.