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The network of the RNA-binding protein AtGRP7, a component of a molecular slave oscillator in *Arabidopsis thaliana*

The AtGRP7 autoregulatory circuit is the first identified molecular "slave" oscillator that is coupled to the circadian ("master") oscillator of *Arabidopsis thaliana*. The AtGRP7 protein regulates the accumulation of its own mRNA at the posttranscriptional level via alternative splicing. It was recently shown that there is also a cross regulation with the AtGRP8 autoregulatory circuit. We modeled the system composed of these autoregulatory circuits interconnected with the "master" oscillator via an ordinary differential equation approach. As for many biological systems the parameters of these equations are barely known. We defined a cost function that quantifies the overlap between our model and key experimental features. A search in parameter space should evaluate if our proposed model fits with the given experimental data.