Sudoku solver with simulated annealing
Exercise 10, Modelling and Simulation, Utrecht University

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Introduction

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The Sudoku

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$\vec{R}$ can be time independent if $\frac{d\vec{R}}{dt} = 0$. This is the case when $\vec{\Omega} \times \vec{R} = 0$. This holds for $|\vec{\Omega}||\vec{R}|\sin(\theta) = 0$. Now, either $\vec{R} = 0$, which is trivial. Or, $\vec{\Omega} = 0$, in this case there is no optical field. Or, $\sin(\theta) = 0$, in which case $\vec{\Omega}$ and $\vec{R}$ are parallel or point in the same direction. It follows that it is possible for this equation to also yield a time-independent solution, either in absence of an optical field, or when the two vectors are parallel, solving the contradiction.