Integral Equations in Visual Computing Summer term 2008 Dr. Bernhard Burgeth

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## Assignment C2

(classroom assignment)

## **Problem:**

Calculate the fundamental solution of the following system of differential equations

$$\begin{cases} y_1' = -\omega y_2, \\ y_2' = \omega y_1, \end{cases}$$

with a constant  $\omega \in \mathbb{R}$ . Make sure that the solutions are independent.