

Course Project for 2017 IAM
Numerical Methods for Solving Heat Equation

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1 Problem Formulation

$$\begin{cases} \frac{\partial u}{\partial t} = \Delta u \\ u|_{\partial\Omega \times [0,1]} = 0, \Omega = [0,1] \times [0,1] \\ u|_{t=0} = \sin(\pi x) \sin(\pi y) \end{cases}$$