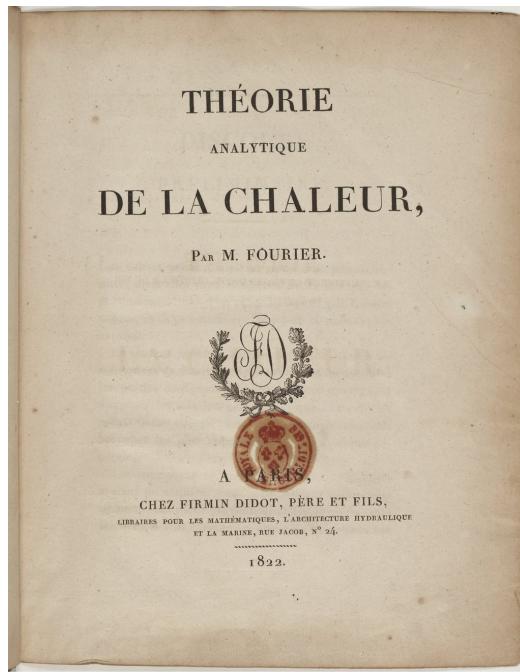


## Aula 46

# Eq. Diferenciais Parciais e Séries de Fourier



# Equação do Calor



Source gallica.bnf.fr / Bibliothèque nationale de France

## Problema de Valor Inicial e Fronteira

$$\left\{ \begin{array}{l} \frac{\partial u}{\partial t} = \alpha \frac{\partial^2 u}{\partial x^2} \\ u(x, 0) = f(x) \quad 0 < x < L \\ u(0, t) = T_0(t), \quad u(L, t) = T_L(t) \quad t > 0 \end{array} \right.$$