

- If you want to **test some of the library capabilities** on **your problem** without jumping in and implementing everything from scratch, then you can use in the test directory the examples in the fileread folder to try it,
- The test in pargen folder shows how the various part discussed here can be used to solve for a second order equation in 3D with Dirichlet boundary conditions

$$\begin{cases} -\frac{a_1 \partial^2 u}{\partial x^2} - \frac{a_2 \partial^2 u}{\partial y^2} - \frac{a_3 \partial^2 u}{\partial z^2} + b_1 \frac{\partial u}{\partial x} + b_2 \frac{\partial u}{\partial y} + b_3 \frac{\partial u}{\partial z} + cu = f, \\ \quad \text{for } (x, y, z) \in [0, 1]^3, \\ u = g, \\ \quad \text{for } (x, y, z) \in \partial[0, 1]^3. \end{cases}$$