Fv

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Contents

1 Standard Diffusion equation

$\nabla \cdot (D(x) \ \nabla c) = f(x) \ \in \Omega$
$c(x) = 0 \ \text{on} \ \Gamma$

2 Finite Volume

Integral Form $\int^\Omega \nabla \cdot (D(x) \nabla c - f) = 0$

$\int_{\partial \Omega} D(x) \nabla c \cdot \vec{n} - \int_\Omega f(x) \, \mathrm{d}x = 0$

```python
import numpy as np
np.zeros(10)
```