

MATH 676

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**Finite element methods in
scientific computing**

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Lecture 13:

A fourth example:

The *step-4* tutorial program

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**A dimension-independent
Laplace solver**

step-4

Step-4 shows:

- Everything we did in step-3, but...
- ...in a dimension independent way

step-4

Read through the commented program at

http://www.dealii.org/7.1.0/doxygen/deal.II/step_4.html

Then play with the program:

```
cd examples/step-4
```

```
cmake -DDEAL_II_DIR=/a/b/c . ; make run
```

This will run the program and generate output files:

```
ls -l
```

Then visualize both the 2d and 3d solutions:

```
visit
```

Next step: Play by following the suggestions in the results section. This is the best way to learn!

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