Hydroinformatik II
"Prozesssimulation und Systemanalyse"
Hydroinformatik II Übungen @ 2020

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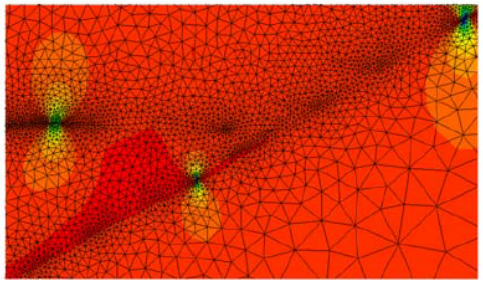
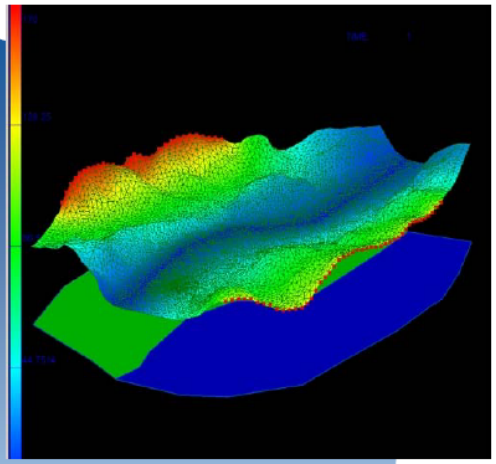
Konzept

$$\frac{d\psi}{dt} = \frac{\partial\psi}{\partial t} + \mathbf{v}^E \nabla\psi$$

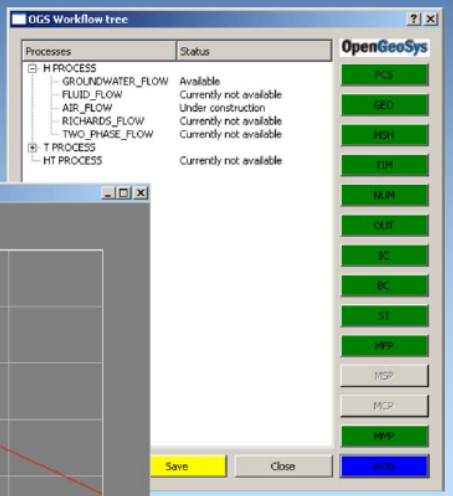


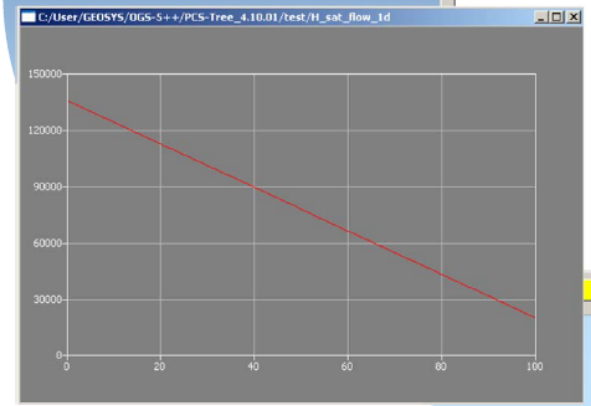
Basics
Mechanik

Anwendung



Numerische
Methoden





Programmierung
Visual C++

Prozessverständnis

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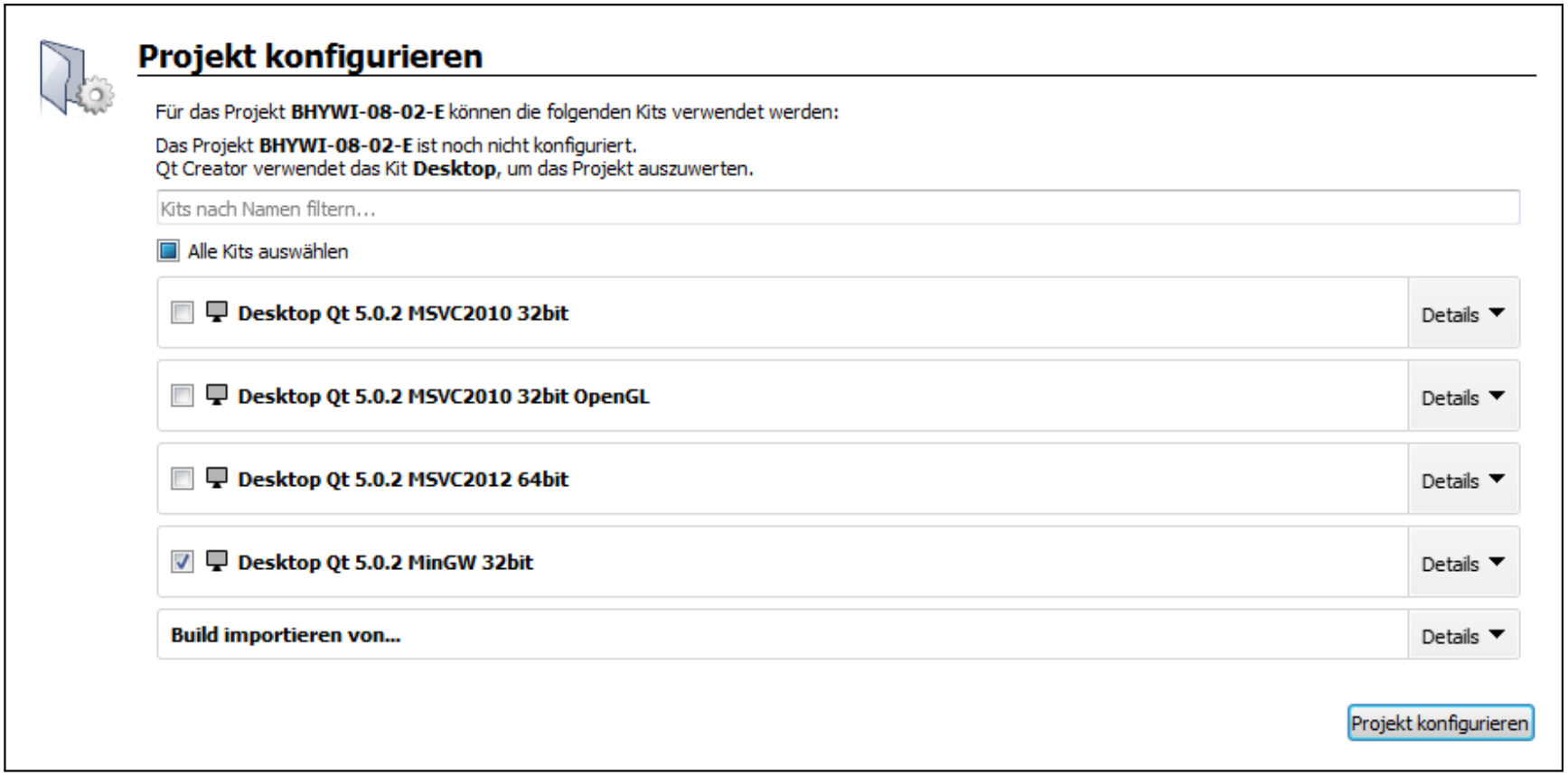
Qt: Konfigurieren

BHYWI-08

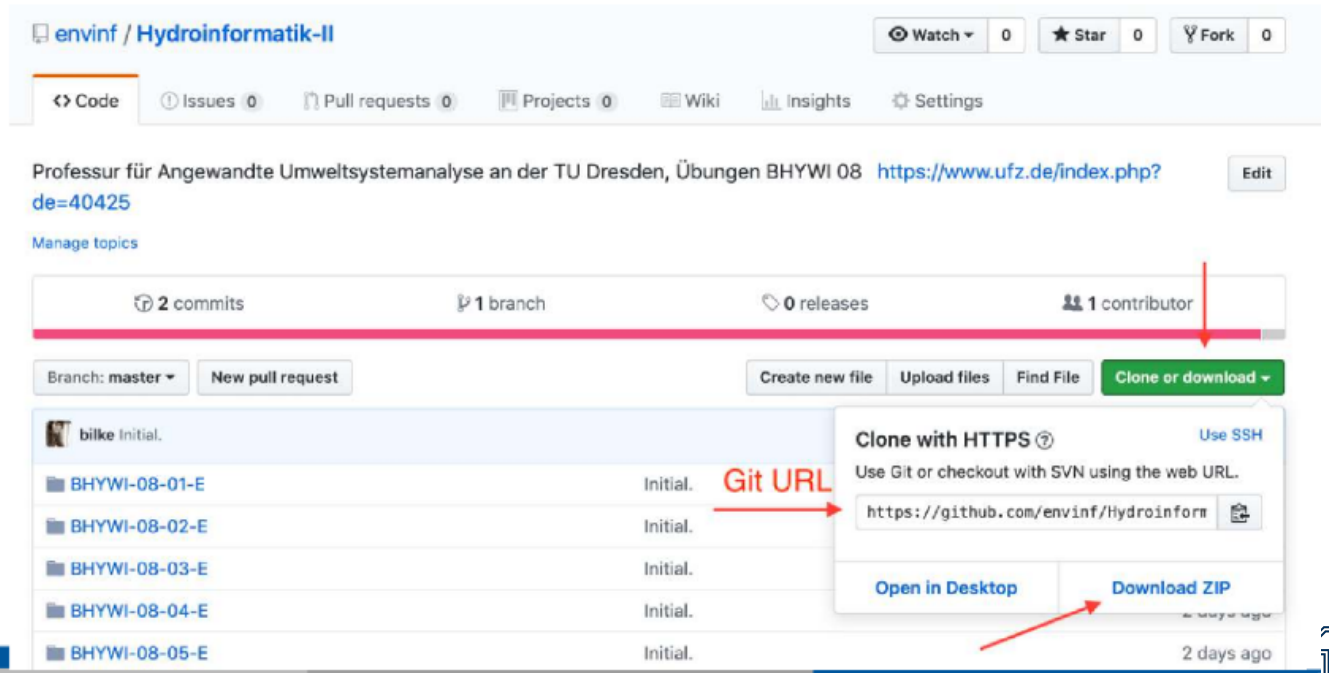


Exercise: Get example files from GitHub

- https://github.com/envinf/Hydroinformatik-II
- Per Git:

```
git clone https://github.com/envinf/Hydroinformatik-II
```

- Or as ZIP



E1: Qt: Hallo World

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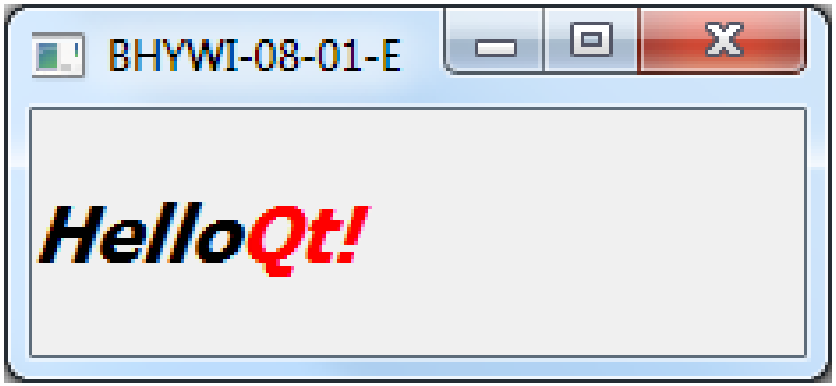

- Qt: Grafische Programmierung in C++
- Dialog - Plots

```
#include <QApplication>
#include <QLabel>
int main(int argc, char *argv[])
{
  QApplication app(argc, argv);
  QLabel *label =
  new QLabel("<h1><i>Hello<!i>""<font color=red>Qt!</font></h1>");
  label->show();
  return app.exec();
}
```

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E2: Funktionssimulator

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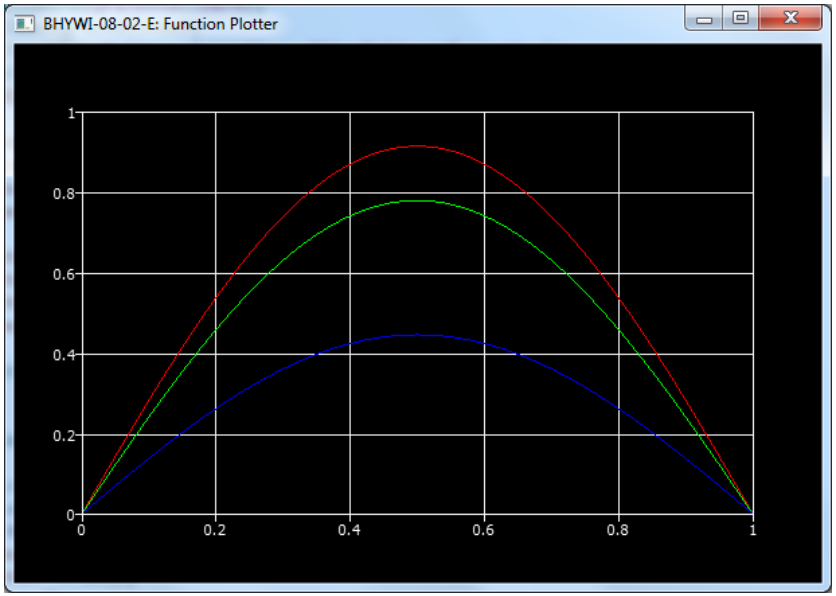

- Darstellung einfacher Funktionen
- Analytische Lösungen
- x-y Plots

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Qt: Compile a Qt project from command Line

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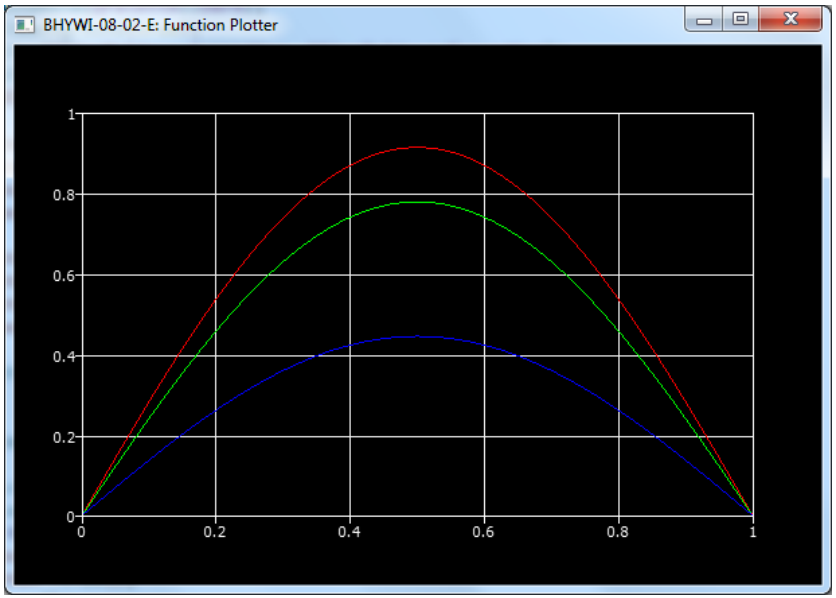

1. `cd /your_project_folder/`
2. `qmake -project` (creates pro-file)
3. `qmake` (creates makefile)
4. `mingw32-make` (creates exe-file)

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