

# Fundamentals of Wave Simulation - Solving Hyperbolic Systems of PDEs

Kick Off

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*TUM Uhrenturm*

# Agenda

## Today

- Time line
- Meetings
- Dates and deadlines
- Templates for the deliverables
- Codebase and access to Git

# At least three meetings with your supervisor

## Initial meet and greet

## Meet again

- Draft concept of paper and presentation
- Concept of implementation

## More meetings

- First version of the paper and presentation
- Implementation is close to convergence

## Still more meetings

- Meet as often as possible

# Input

## Basic Implementation of FV for the 1D Advection Equation

- 1D, regular, LaxFriedrichs,...
- Did everyone get invited to the gitlab group ?
- Create your own branch and start implementing.

## Needed Tools

- Paraview: <http://paraview.org>
- SCons: <http://www.scons.org>
- Git: <http://git-scm.com> <https://gitlab.lrz.de/>

## Templates

- Not for presentation but for paper
- Download from homepage

# Presentation

## Structure

- 30 min for Programming Topics
- 60 min for Lecture Topics

## Q&A, Discussion

- 15 min
- Everybody participates (is part of your grade)
- If you don't ask we will

# Paper

## Paper

- 5 pages, IEEE layout
- First submission deadline (Content should be final): **Thursday, December 21st**
- Presents Theory
- Presents results of your work (Use your own plots, figures ..)

## Plagiarism

- **No Plagiarism !**

## Review

- Starts after the first Submission deadline
- One paper each, randomly distributed

# Time line

- **Attendance to all presentations is mandatory !**

## Dates

- December 7th: Ioannis Kouroudis, David Frank
- December 14th: Subhan-Jamal Sohail, Fukushi Sato, Nathan Brei
- January 11th: Dewitte Thiebout, Kislaya
- January 18th: Bodhinanda Chandra, Ayman Noureldin, Dominik Volland
- January 25th: Emily Bourne, Ashwary Pande

# Deadlines

## Deadlines

- Paper first submission deadline: **Thursday, December 21st**
- Review start: **Saturday, December 23rd**
- Review deadline: **Saturday, January 6th**
- Paper final submission deadline: **Saturday, January 13th**
- Code submission deadline: **Saturday, January 13th**



# Grades

## Final grade composition

- Paper 1/3
- Presentation 1/3
- Participation 1/3
  - Reviews
  - Active Participation