Graduate Academy of the SC SimTech

The Graduate Academy of the SC SimTech promotes excellence in post-doctoral and doctoral education across all disciplines in the field of simulation science.

It offers an interdisciplinary, structured, and international training program in order to prepare the candidates with optimal conditions for their successful PhD and beyond.

Johannes Kästner, Head of GS SimTech
Agenda

1. About us.
2. Important GS steps during your doctoral “life cycle”.
3. Questions.
About us

Head and Coordination

Prof. Dr. Johannes Kästner
Head of GS SimTech

Katharina Fuchs
Coordinator GS SimTech

Almut Meyer zu Schwabedissen
Equality and Diversity Manager
Early Career Management
About us

Coordination

- Coordination of your PhD “life cycle”
  - Process steps (advise during your registration as doctoral student, Milestone Presentation, Stay Abroad, Training Program, Submission of thesis and oral exam).

- Communication via
  - Confluence,
  - GS-Simtech@ (Email distribution list),
  - Email: Graduiertenschule@simtech.uni-stuttgart.de
  - Office hours: Mon, Tue

Katharina Fuchs

Coordinator GS SimTech
About us
Equality and Diversity Manager

- Early-career counseling
- Recruiting and onboarding processes
- Internationalization
- Administrative cooperation (University, IntCDC, MPI)

Almut Meyer zu Schwabedissen
Equality and Diversity Manager
Early Career Management
About us: Development of GS SimTech

- In total: about 160 doctoral students
- Almost all doctoral students are employees of Univ. of Stuttgart under an E13 contract.
- You have several roles:
  - Employee
  - (SimTech financed researcher)
  - Doctoral student

Here, we only talk about your role as Doctoral student in the GS SimTech.
GS SimTech: Overview of Educational Concept

1st phase of education
- subject specific courses (6-12 ECTS)
- Key Qualifications (1 course)
- 1 GS unit
- Status Seminars

2nd phase of education
- 2 GS units
- Stay abroad
- Status Seminars

Acceptance at GS SimTech

12–18 months

in total 5 (7) years maximum

Acceptance as doctoral candidate

Acceptance as doctoral candidate
Glossary of GS SimTech Training Program

- **Annual poster presentation**
- **Subject-specific courses** (at least 6 CP)
- **Additional GS unit 2** (i.e. career counseling, mentoring schemes, ...)
- **Key qualifications** (at least 1 course)
- **Additional GS unit 1** (i.e. career counseling, mentoring schemes, ...)
- **GS Seminar** (at least 1)

University of Stuttgart
Glossary of GS SimTech Training Program

• **Subject-specific courses**
  → May be selected from the regular courses offered by the University of Stuttgart or from suitable courses outside the University of Stuttgart.
  → Ideally completed before MSP.
  → Who decides: advisor and doctoral student, should be specified in the doctoral supervision agreement.
  → Number of Credit Points: at least 6 CP.
• **Key qualifications**

→ To acquire interdisciplinary qualifications, e.g., chosen from the program offered by [GRADUS](#) or the Language Center.

→ Who decides: doctoral student (and advisor).

→ Number of Credit Points: At least 1 course (3 CP).
Glossary of GS SimTech Training Program

- **Units offered by GS SimTech**
  - To promote interdisciplinary networking and to expand your scientific horizon.
  - To be selected from the “Academy Program” of GS SimTech.
  - 3 offers in total (at least one prior to MSP)
- **GS Seminar (at least 1 seminar)**
- **Additional GS units**
  - Who decides: doctoral student
  - Number of Credit Points: *Usually no credit points assigned*
• GS Seminar (at least 1 seminar)
https://wisman.izus.uni-stuttgart.de/display/SimTechGS/4. +Seminars+and+offers+by+GS+SimTech
Glossary of GS SimTech Training Program

- **Annual poster presentation** (For example during the annual SimTech status seminar.)

Best Poster Award

“…the Best Poster Award was also presented at this year's status seminar in Bad Boll. Voted by all participants of the seminar.”
GS SimTech: Overview of Educational Concept

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- 1 GS unit
- Status Seminars

Milestone Presentation

Acceptance at GS SimTech
- 12-18 months

2nd phase of education
- 2 GS units
- Stay abroad
- Status Seminars

Acceptance as doctoral candidate
- in total 5 (7) years maximum
GS SimTech: Milestone Presentation

Milestone Presentation

1st phase of education

2nd phase of education

12–18 months

in total 5 (7) years maximum

• After about 12–18 months.

• Is a requirement of the GS SimTech.

• MSP helps you reflect upon the first year of your doctoral studies, whether you are still on track of your project goals, or if something needs to be readjusted.

• Your main advisor and also the co-advisor will give you valuable suggestions and can, if necessary, adjust the course together with you.
GS SimTech: **Milestone presentation**

Please **register your Milestone Presentation at the GS coordination**, so we can invite SimTech members to your presentation.

**Compliance** ("Bestätigung über die Einhaltung der Regeln der GS SimTech zur Milestone Presentation") with GS regulations must be sent to the GS coordination.

Send **Milestone Report** (about 10 pages) to GS and both advisors.

(Afterwards, your milestone report can then be posted in Confluence "Milestone Reports")

**Public talk** (30 min) + non-public oral exam/discussion (~60 min) with both advisors.

Send **protocol** ("Minutes of the ‘Milestone Presentation’") with the result to the GS coordination.
GS SimTech: **Milestone presentation**

Please register your Milestone Presentation at the GS coordination, so we can invite SimTech members to your presentation.

**Compliance**

Your documents will be kept in your PhD file.

Send Milestone Report (about 10 pages) to GS and both advisors. (Afterwards, your milestone report can then be posted in Confluence "Milestone Reports").

Public talk (30 min) + non-public oral exam/discussion (~60 min) with both advisors.

Send protocol ("Minutes of the 'Milestone Presentation'") with the result to the GS coordination.

- Your documents will be kept in your PhD file
GS SimTech: Stay Abroad

1st phase of education

12–18 months

2nd phase of education

in total 5 (7) years maximum

• Stay abroad

• As a doctoral student of GS SimTech you should go abroad for up to 3 months for a research stay. Time, duration, place, etc. should be discussed and planned with your supervisor(s).

• As part of your education in the GS SimTech, SimTech supports your stay abroad (funding; assistance in finding courses for intercultural communication, supporting visa processes (through International Office) etc.).
GS SimTech: Stay Abroad
(up to 3 months)

Together with your advisor, you determine the time, duration, and location of your stay.
(The university does not provide a travel insurance - you have to take care of that yourself.)

Once you have a confirmed host for your research visit, you can request funding from GS SimTech.

Please apply for funding by sending this form to graduiertenschule@simtech.uni-stuttgart.de: "Request for travel expenses at SC SimTech" ("Antrag auf Reisemittel im SC SimTech"). (See Confluence)

After a Stay Abroad: Doctoral students who have received funding for their research Stay Abroad provide a detailed experience report for future doctoral students. Please use our template “Guidelines to writing a report” and send us your 3-5 page report as PDF to graduiertenschule@simtech.uni-stuttgart.de.
GS SimTech: Stay Abroad
(up to 3 months)

Together with your advisor, you determine the time, duration, and location of your stay.
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The settlement will be made according to the BW’s law on travelling costs (Landesreisekostengesetz). The traveller is required to comply with the guidelines of the University of Stuttgart and the state of Baden-Württemberg.

Further information about applying and settling a business trip is provided on the pages of the Travel Cost Center (Reisekostenstelle).
GS SimTech: Stay Abroad

Please use our new template and send us your 3–5 page report as PDF to graduierenschule@simtech.uni-stuttgart.de

Confluence: https://wisman.izus.uni-stuttgart.de/x/O4LnEQ
Together with your advisor, you determine the time, duration, and location of your stay. (The university does not provide a travel insurance – you have to take care of that yourself.)

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• Your documents will be kept in your PhD file
GS SimTech: Doctoral Examination Procedure

1st phase of education

12-18 months

2nd phase of education

in total 5 (7) years maximum
GS SimTech: **Doctoral Examination Procedure**

- **Admission** to the examination via the faculty
  SimTech-Only via GS SimTech Coordination

- Cumulative dissertation is possible (rules of the participating faculty apply)
  SimTech-Only: rules of SimTech apply

- At least one **external examiner** (outside of University of Stuttgart)!

- “**Confirmation of compliance with the GS SimTech rules for submission PhD thesis**” (“Bestätigung über die Einhaltung der Regeln der GS SimTech zur Einleitung des Promotionsverfahrens”) must be sent to the GS coordination.

- Submission of the thesis to GS and the faculty.

- **Oral exam** + talk of 30 minutes before your exam (open to all employees and students of the University of Stuttgart).
• Admission to the examination via the faculty (SimTech - Only via GS SimTech Coordination).

• Cumulative dissertation is possible (rules of the participating faculty apply) (SimTech - Only: rules of SimTech apply).

• At least one external examiner (outside of University of Stuttgart)!

• Compliance ("Bestätigung über die Einhaltung der Regeln der GS SimTech zur Einleitung des Promotionsverfahrens") with GS regulations must be sent to the GS coordination.

• Submission of the thesis to GS and the faculty.

• Oral exam + talk of 30 minutes before your exam (open to all employees and students of the University of Stuttgart).

What to do when your dissertation is finished and you want to hand it in? Inform the GS coordination about your next steps! Every faculty has its own rules about what has to be handed in when and how.
GS SimTech: Doctoral Examination Procedure

After your oral exam:

- Improvements of your dissertation may have to be made and it has to be approved for printing by your main reviewer.

- As a doctoral student within the GS SimTech, the cover sheet must contain the naming of SimTech:
  
  \textit{A thesis submitted to the Faculty xx and the Stuttgart Center for Simulation Science in partial fulfillment of the requirements for the degree of Doctor xx (xx)}

- Publish your thesis.

- After submitting the deposit copies, the thesis has to be approved by your main examiner, the dean's office and SimTech, then it will be published and your certificate will also be approved for handover.
Too much information?
- Don‘t worry. You can always contact us.
- Via e-mail: graduiertenschule@simtech.uni-stuttgart.de
- Or call us directly:
  - Katharina Fuchs: 0711 685 60115
  - Almut Meyer zu Schwabedissen: 0711 685 60104

And if you wish to read up on this in your own time, you will find all the information and forms on our internal SimTech webpage in confluence (https://wisman.izus.uni-stuttgart.de/display/SimTechGS/GS-SimTech+-+english)
Some Terms and Abbreviations

• **Confluence**: Our SimTech-internal website: https://wisman.izus.uni-stuttgart.de/display/SimTech/SimTech+Startseite
  Access requires an account (and permission from SimTech).

• **DaRUS** - the Data Repository of the University of Stuttgart:
  where your research data should be deposited and published.
  → rdm@simtech.uni-stuttgart.de

• **PUMA** – (“Akademisches Publikationsmanagement”) management tool for scientific publications and bookmarks
  https://wisman.izus.uni-stuttgart.de/display/SimTech/Publication+notification+workflow+for+SimTech
SimTech Project Networks (PNs)

- PN 1: Data-Integrated Models and Methods for Multiphase Fluid Dynamics
- PN 2: In Silico Models of Coupled Biological Systems
- PN 3: Data-Integrated Model Reduction for Particles and Continua
- PN 4: Data-Integrated Control System Design with Guarantees
- PN 5: On-the-fly Model Modification, Error Control, and Simulation Adaptivity
- PN 6: Machine Learning for Simulation
- PN 7: Adaptive Simulation and Interaction
- PN 8: Accelerating Simulation by Quantum Computing
Still lost?

• Here are some more ressources you can tap into:

In addition:
Ask your advisor(s)
Ask the fellow GS SimTech PhD students in your group
Ask the fellow PhD students in your PN
Ask the SimTech Doctoral Spokespersons
Ask the GS Coordination
Ask the head of the GS SimTech
Spokespersons of PhD Students

Moritz. R. Schäfer,
David Rosin,
Nico Segreto

email: doktorandensprecher@simtech.uni-stuttgart.de
Thank you!

Do you have any questions? Please do not hesitate to ask.

If you have ideas to share, we appreciate your input!