DK CIM & DP DOCC at the Universität Innsbruck

Doctoral Programme Computational Interdisciplinary Modelling
DK CIM

In 2010 the DK CIM was initiated at the Universität Innsbruck within the framework of the Research Area Scientific Computing. The program provides substantiated research-guided and well-structured training for excellent Ph.D. students in the interdisciplinary field of computational modelling utilizing high performance computing, within the fields of atmospheric science, chemistry, computer science, material science, engineering science, mathematics and physics.

uibk.ac.at/dk-cim

Doctoral Programme Dynamics of Complex Continua
DP DOCC

The DP DOCC started 2019 and is a novel interdisciplinary EC H2020 Marie Skłodowska-Curie COFUND doctoral training programme for international high-potential early-stage researchers. Focusing on modelling and simulation in the intersectorally seminal fields of computational material, fluid and gas dynamics, it is rooted in basic, natural and engineering sciences at the Universität Innsbruck.

uibk.ac.at/projects/dp-docc

Contact

Universität Innsbruck

DK CIM: Computational Interdisciplinary Modelling
Technikerstrasse 25/3/33
6020 Innsbruck

Telefon +43 512 507-54442
E-Mail dk-cim@uibk.ac.at

DP DOCC: Dynamics of Complex Continua
Technikerstrasse 25/3/33
6020 Innsbruck

Telefon +43 512 507-52725
E-Mail dp-docc@uibk.ac.at

universität innsbruck

Programme

of the

Summerschool 2022:
Introduction to Scientific Coding with Julia

Innsbruck Doctoral College
Computational Interdisciplinary Modelling
&
Doctoral Programme
Dynamics of Complex Continua

Sonday, July 17th to Thursday, July 21st 2022
UZE Obergurgl & Universität Innsbruck
Tyrol, Austria

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Programme

Sunday, July 17th 2022: Universität Innsbruck – Transfer to Obergurgl

15:00 – 17:30	Transfer / bus departure meeting point: parking lot Campus Technik
17:30	Get together – welcome drink
18:30 – 19:30	Dinner

Monday, July 18th 2022: UZE Obergurgl

07:30 – 8:30	Breakfast
08:30 – 10:00	Poster session and discussion of thesis progress **(7 Students, 7 min. presentation + 5 min. discussion)**
10:00 – 10:30	Coffee
10:30 – 12:00	Poster session to be continued (6 Students)
12:00 – 14:00	Lunch
14:00 – 18:00	social event: walk through the stone pine forest to the Schönwieshütte
18:30 – 19:30	Dinner
20:00 – 21:30	**hang your poster for the next day**

Tuesday, July 19th 2022: UZE Obergurgl

07:30 – 8:30	Breakfast
08:30 – 10:00	Romeo and Julia: HPC and the many-electron problem ***Markus Wallerberger (TU Vienna)***
10:00 – 10:30	Coffee
10:30 – 12:00	Introduction to Julia I *Peter Kandolf, Jonas Kusch & Gregor Ehrensperger*
12:00 – 14:00	Lunch
14:00 – 16:00	Introduction to Julia II
16:00 – 16:30	Coffee
16:30 – 18:00	Introduction to Julia III
18:30 – 19:30	Dinner
20:00 - 21:30	**General assembly dk-cim and dp-docc with live stream**

Wednesday, July 20th 2022: UZE Obergurgl

07:30 – 8:30	Breakfast
08:30 – 10:00	Industrial Environment and Computational Methods ***Bernhard Valentini (Plansee*)**
10:00 – 10:30	Coffee
10:30 – 12:00	Data Science with Julia I
12:00 – 14:00	Lunch
14:00 – 16:00	Data Science with Julia II
16:00 – 16:30	Coffee
16:30 – 18:00	Nonlocal operators and complex materials: From models to numerical approximation ***Heiko Gimperlein,*** Self-similar singularities on nonlinear wave equations**.** ***Birgit Schörkhuber***
18:30 – 19:30	Dinner
20:00 – 21:30	**free time for social interaction**

Thursday, July 21st 2022: UZE Obergurgl

07:30 – 8:30	Breakfast
08:30 – 10:30	Talks of new Students dk-cim **(5 Students, a 20 min. talk + 4 min. dsicussion)**
10:30 – 11:00	Coffee
11:00 – 12:30	Performance and Parallelisation with Julia I
12:30 – 14:00	Lunch
14:00 – 16:00	Performance and Parallelisation with Julia II
16:00 – 18:00	**Transfer to Innsbruck**