



# HASCO School 2019 - welcome

## Arnulf Quadt Georg-August-Universität Göttingen

Home Partners Programme 2012 Application Material Photos Guest book Contact

Hadron Collider School - HASCO

partners

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+ U4 (Gent, Groningen, Uppsala)



+ Europe (UK, Germany, Belgium, Italy, Rumania, Switzerland, Spain, Netherlands, Czech Republic, Norway, Sweden)

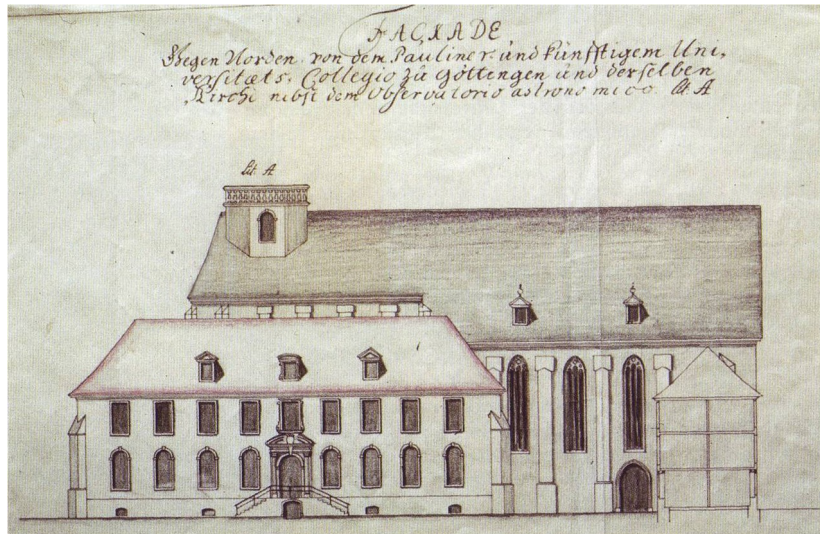
+ Ohio/USA, Pakistan, China, United Arabian Emirates, India, South Africa ...



# University of Göttingen







1737...

## Göttingen University



... 2019



## Facts and Figures

- Students 2015/16: 31.298
- 12 % international students
- Increasing number of students (from 24.380 (2010/11) to 31.298 students)
- More than 190 study programmes
- 5 Graduate schools (with more than 3.700 doctoral students)



# University of Göttingen

## Göttingen Campus





## International Study Programmes

- more than 50 international study programmes
- mainly international master programmes
- 14 joint international study programmes with partnerinstitutions (double degree / joint degree programmes)





## Infrastructure in Learning and Teaching

- Establishment of new seminar rooms and internships with state of the art equipment
- Investments in multi media lecture rooms
- Excellent University Library
- New teaching and learning building (650 student working places)





# Physics in Göttingen



Georg Christoph Lichtenberg



Carl Friedrich Gauß



Max Born



Werner Heisenberg



Peter Debye



James Franck



Maria Göppert-Mayer

cmpb DFG Forschungszentrum Molekularphysiologie des Gehirns  
DFG Research Center Molecular Physiology of the Brain

SFB755  
Nanoscale Photonic Imaging



- 10 million Euro/year (University)
- 7 million Euro/year (external)
- 26 professor positions
- 150 scientists (20% international)
- 100 technical and admin. staff

## STUDENTS

- 1000 students (undergr. & grad.)
- 150-200 beginners per year
- 20% female students
- 5% international students (up to MSc)
- 25% international PhD students





# Schedule

## ERASMUS-IP Hadron Collider Physics School (HASCO) 2019

18:00  
18:30  
19:00  
19:30  
20:00  
20:30  
21:00

Su, 15.07.
arrival in Göttingen train station & youth hostel
registration
dinner

	Mo, 16.07.	Tu, 17.07.	We, 18.07.	Th, 19.07.	Fr, 20.07.	Sa, 21.07.	Su, 22.07.
08:00	breakfast	breakfast	breakfast	breakfast	breakfast	breakfast	breakfast
09:00	intro & welcome	QCD and jets physics and Kinematics (1)	ROOT Lecture (2)	Statistics Lecture (2)	QCD and jets (experiment, 1)		
10:00	hadron collider physics and Kinematics (1)						
11:30	seminar preparation in groups	seminar preparation in groups		seminar preparation in groups	seminar preparation in groups	sozialton "Diege des Wissens" Paulinekirche	
12:30	lunch	lunch		lunch	lunch	free time in Göttingen	Excursion to Wernigerode (Harz)
13:00	hadron collider physics and Kinematics (2)	ROOT Lecture (1)	trip to Wolfsburg and visit of phaeon physics exhibition	ROOT & stats. Tutorial (1) @ Uni	QCD and jets (experiment, 2)		visit to the city and steam train ride to Brocken mountain
15:30	break	break		break	break		
16:30	QCD and jets (theory, 1)	Statistics Lecture (1)		ROOT & stats. Tutorial (2) @ Uni	student presentations		
17:30				student presentations			
18:30	dinner	external dinner in restaurant Felini	dinner	dinner	dinner	optional dinner in Göttingen city no dinner foreseen in Youth Hostel	external dinner in Wernigerode
20:00							
20:30							
21:00							

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	Mo, 23.07.	Tu, 24.07.	We, 25.07.	Th, 26.07.	Fr, 27.07.
08:00	breakfast	breakfast	breakfast	breakfast	breakfast
09:00	electroweak physics (1)	electroweak physics (2)	top quark Physics (1)	SUSY and Exotics (2)	student presentations
10:30	seminar preparation in groups	detector physics	top quark Physics (2)	student presentations	student presentations
11:30					
12:30	lunch	lunch	lunch	lunch	lunch
13:30	LHC Accelerator	Higgs physics	SUSY and Exotics (1)	written examination	school summary & certificates
15:30	break	break	break	break	break
16:30	student presentations	student presentations	student presentations & evaluation	student presentations	departure
17:30					
18:30	dinner	dinner	dinner	external dinner at Bug Plessee	
19:30					
20:00					
20:30					
21:00					



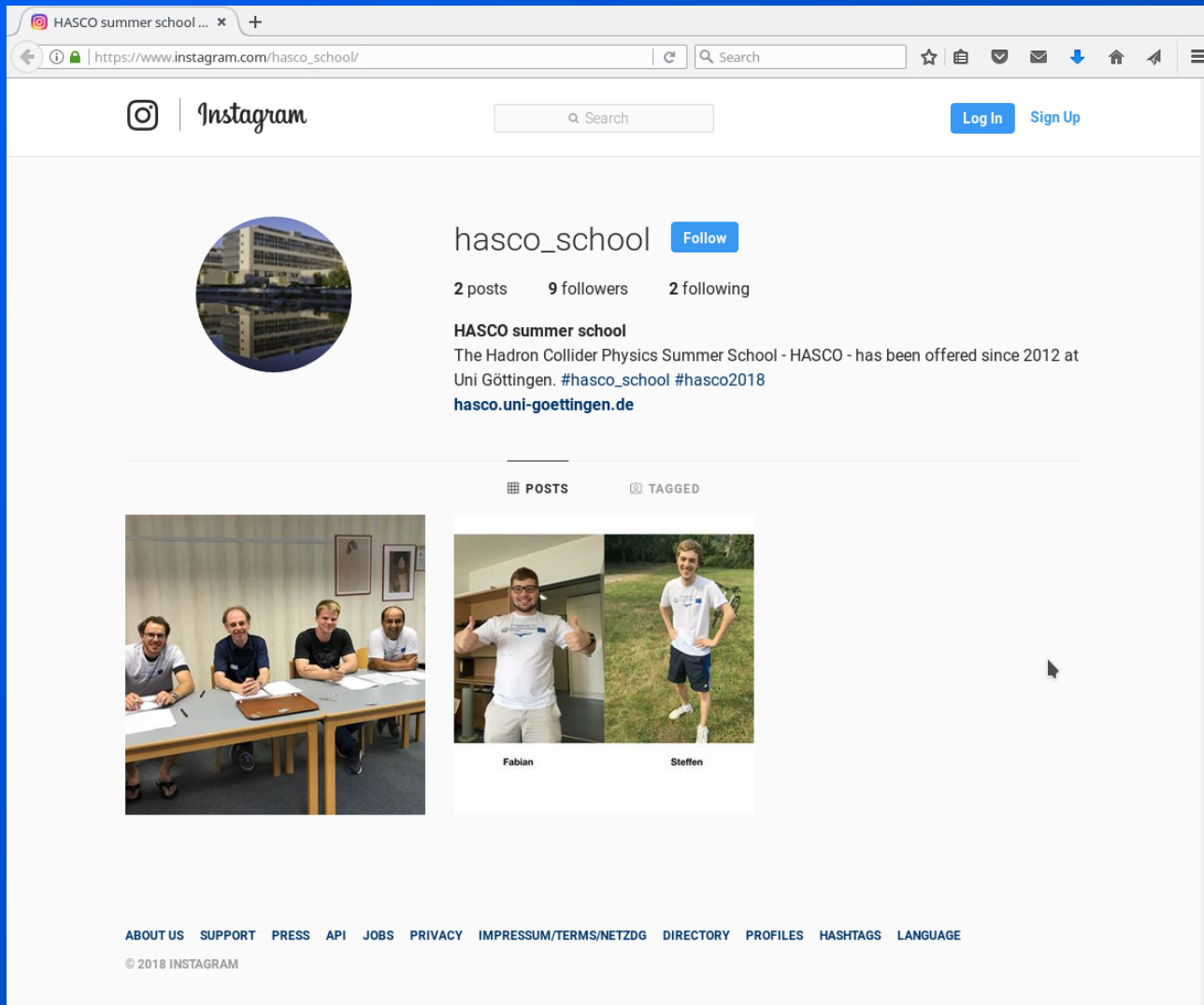
- Lectures & tutorials
- ROOT training session
- written examination on Thursday → 3 ECTS credits
- Results, certificates and departure on Friday (26.07.19)
- external dinners and BBQ → buffet style for all dietary restr.
- Monday evening: BBQ at youth hostel
- Tuesday morning: group photo
- Tuesday evening: bowling → sign up with Andreas
- Wednesday 19h30 at youth hostel: history walking tour
- Thursday 11h00: question & answer session, exam prep
- Thursday evening: Dinner in restaurant Pagoda
- Evaluation of school





# Photo competition

- Upload your pictures onto Instagram and tag them with account name “hasco\_school”
- Please include hashtags #hasco\_school and #hasco2019
- We will make a preselection and re-poste the best ones every day.
- We will have a vote on the best ones.
- Prizes will be awarded on Friday.





# More info



- Coffee breaks
- Lunch (mensa & CaPhy)
- Film team and photos (see HASCO web page)
- WLAN
- Student-ID & GöVB
- Bus schedules:
- School fee receipts and reimbursement
- Secretariat (D.01.117,  
Finn Krummacker,  
Bernadette Tyson)
- The Team:
  - Andreas Kirchhoff
  - Thomas Peiffer
  - Jörn Lange
  - Stan Lai
  - Arnulf Quadt
  - .....