

SIAM Student Chapter Final Report for 2018–2019 Academic Year (1 of 5)

Date of report:	June 26, 2019
Student Chapter:	Charles University in Prague Chapter of SIAM
Chapter Web site:	http://siam.cuni.cz/en/
Chapter Facebook Page:	https://www.facebook.com/PragueSIAMSC
Chapter Twitter Handle:	@SIAMSCPrague
Faculty Advisor:	Josef Málek and Zdeněk Strakoš

New officers: president, vice president, secretary and treasurer

Demographic of Chapter Membership

Member type		Departments		Gender	
		Mathematics	44		
Undergraduates	23	Applied Mathematics	32	Male	74
Graduate Students	30	Physics	12	Female	23
Faculty Members	10	Computer Science	5	Total Members	97
Other Associate	34	Statistics	2		
Total Members	97	Other	2		
		Total Members	97		

The total number of members has increased. Most of them are young Ph.D. students, however the majority of active people is still formed by students of Mathematical Modelling and Numerics. Older members quit the student chapter very occasionally.

Report on Chapter Election

Date of Election: June 19, 2019 to elect officers to serve term from July 1, 2019 to June 30, 2020.

President:	Petr Pelech, pelech@karlin.mff.cuni.cz
Vice President:	Mark Dostalík, mark.dostalik@gmail.com
Secretary:	Jiří Malík, georgios.malik@gmail.com
Treasurer:	Shahin Heydari, sh1990.heydari@gmail.com
Webmaster:	Martin Sýkora, ma.sykorka@gmail.com

Chapter Highlights

Meeting new students

At our faculty, there is a well-established tradition of welcoming new students and introducing them to the university environment at the beginning of their undergraduate study. Since the modification of the study system, that separated the undergraduate and the graduate study, there are students who only start their study at our faculty at the graduate level. As the number of such students was not significant, there was not a similar event organized for them.

We saw a gap here and decided to establish an event, which would make their start at our faculty easier. We contacted the Student Affairs Department to ask for help with contacting the new students, and in fact their response was very supportive. They were pleased to hear about such an activity and in fact they immediately suggested to broaden the audience also for the undergraduate students, who could not attend the event organized for them.

The aim of this meeting was to welcome the newcomers and to introduce them to the study system at our faculty. We communicated some information which could differ from the system which they were used to from their undergraduate study, and we shared some advices regarding the life in Prague. We informed them about some important deadlines which are due by the beginning of the academic year and reminded them about some activities which could be of their interest. We believe that this is also a good way to attract new members of our Chapter.

This was the first event of such kind organized at the faculty. A very positive feedback both from students and from the employees of the Student Affairs Department assured us that it has a great potential. Although 10 students is not few, regarding the total number of new master students coming from other universities, we found several ways how to improve the organization in order to attract even more participants in the future years.

Report on Chapter Activities

TITLE OF THE EVENT: Meeting new students

DATE OF THE EVENT: October 1 2018

ATTENDANCE: 10

EVENT DESCRIPTION: See the information in highlights.

TITLE OF THE EVENT: Beginning of the semester meeting

DATE OF THE EVENT: October 15 2018

ATTENDANCE: ≈ 35

EVENT DESCRIPTION: At the beginning of the winter semester, our Chapter co-organized the traditional informal meeting which is meant to welcome the new students of Mathematical modelling, introduce them to older colleagues and teachers and possibly to attract new students. It is organized in a local pub and the atmosphere is always very friendly.

TITLE OF THE EVENT: Meeting with Candidates Applying for a Research Grant

DATE OF THE EVENT: October 18 & 29, 2018

ATTENDANCE: ≈ 20 and 15

EVENT DESCRIPTION: The Grant Agency of the Charles University supports PhD students with their own research grants, however, the competition is tough. Every year, successful applicants from our Chapter in cooperation with the Academic Senate of the Faculty organize a meeting where they present the new candidates with advices on how to write a competitive grant application. Also, we invite the vice-deans and ex-members of the Grant Agency evaluating committee to help us highlight the important parts of the process. Two meetings were organized within this event, for students of Mathematics and Physics, and for students of Computer Sciences. In fact, this annual event has a huge impact on the competition, as the level of applications has significantly improved since we organize it.

TITLE OF THE EVENT: SIAM SC Seminar

DATE OF THE EVENT: five times per year

ATTENDANCE: ≈ 15

EVENT DESCRIPTION: Since the foundation of the Student Chapter at the Charles University in Prague, we have organized a regular seminar following the goal to attract both students and teachers. Most of the speakers consisted of PhD students, who tried to introduce their field of research to a more general audience. As before, the seminars are held in the students-friendly atmosphere, with beverages and coffee served at the beginning. Some time for formal as well as casual discussion is reserved before and after the presentation.

Mark Dostálík — How to teach a computer to distinguish cats from dogs

Petr Pelech — Rate-Independent Evolution of Shape Memory Alloys: Gradient Polyconvex Energies

Jiří Malík — Modelling of thermomechanical interaction in the context of the search for extraterrestrial life

Roman Košťál — Geometric numerical integration of Hamiltonian systems

Shahin Heydari — NSFD and FEM Methods for Mathematical Models of Cancer Invasion

TITLE OF THE EVENT: I'm gonna write my bachelor's thesis in L^AT_EX!

DATE OF THE EVENT: December 8, 2018

ATTENDANCE: 30

EVENT DESCRIPTION: The Chapter organized a one-day workshop focused on L^AT_EX typesetting and its use in writing a thesis. We helped the students become familiar with the basics of L^AT_EX up to the level of the template for bachelor's thesis which is provided by the Faculty.

TITLE OF THE EVENT: Christmas party of the Department of Mathematical Modelling

DATE OF THE EVENT: December 10, 2018

ATTENDANCE: ≈ 50

EVENT DESCRIPTION: Every year, the students of mathematical modelling (with the support of the Department of Mathematical Modelling and our Chapter) organizes a Christmas party which is very popular. Proof of that is the fact that also students and members of other departments are happy to join. Tradition of singing carols is an inherent part of the event.

TITLE OF THE EVENT: Hike of the Department of Mathematical Modelling

DATE OF THE EVENT: May 1st, 2019

ATTENDANCE: 37

EVENT DESCRIPTION: In May, we organized a traditional hike of the Department of Mathematical Modelling. As usually, students and members of the department with their families attended the trip and enjoyed a nice day outside of the city. We did an 8 kilometers (5 miles) hike from the east of Prague via lovely Klánovice forest to the restaurant in Klánovice. The participants were from 1 to 62 years old, also one dog included.

TITLE OF THE EVENT: Meeting with Undergraduate Students

DATE OF THE EVENT: May 15, 2019

ATTENDANCE: 5

EVENT DESCRIPTION: In previous years, several members of Prague Chapter of SIAM met with undergraduate students. The goal of these meetings was to provide students with information about study programs Mathematical and Computer Modelling in Physics and Engineering (MCMPE), and Numerical and Computational Mathematics (NCM).

This year we intended to make this meeting more universal. We therefore invited also Ph.D. students from other departments that were not members of our student chapter, who helped us to answer difficult questions about any master study program, not necessarily MCMPE or NCM.

Since the total number of invites students was more than 50, the final amount of participants seems to be very low. Although not having a thorough feedback at our disposal, we conjecture that many students were not interested in our meeting, because this year, for the second time, all departments held similar discussions on their own. We are happy that our student chapter might have motivated the departments to start their own sessions, by having held these meetings for several previous years, but we will skip this event for next year, since it now seems superfluous.

SIAM Student Chapter Final Report for 2018–2019 Academic Year (5 of 5)

TITLE OF THE EVENT: Week of Doctoral Students of the School of Mathematics, 2018

DATE OF THE EVENT: June 6, 2019

ATTENDANCE: ≈ 60

EVENT DESCRIPTION: Each year, the school of mathematics of the faculty organizes a Week of Doctoral Students - a conference where PhD students present their research to a broad audience. Especially, master and PhD students and faculty members from all mathematical departments are invited to participate and learn about research of PhD students from different mathematical areas. Our Chapter promoted the event and helped with organization of the day. Altogether, there were 22 presentations of both younger and more experienced PhD students.

TITLE OF THE EVENT: Business Meeting

DATE OF THE EVENT: June 19, 2019

ATTENDANCE: ≈ 10

EVENT DESCRIPTION: At the business meeting we elected a new committee that will serve in the academic year 2019/2020. We also reviewed and recalled the activities of the Chapter in the past year. We agreed that we have too many activities for too few active organizers. In the following year we will reduce the number of events, focusing on the most important ones, while paying more attention to their preparation. In addition, we will keep trying to expand our student chapter and to attract new Ph.D. students from other departments.