

Chapter highlights

1 Ph.D. seminar

One of the main goals of the SIAM Student Chapter at the Charles University in Prague is to foster communication among students of applied mathematics, especially among those specializing in different disciplines.

Already at the very beginning of the Chapter's activity it has been proposed that a seminar, at which students could present their work and get to know each other's research interest, would be a great contribution to communication. Simultaneously, many Chapter members felt that their presentation skills did not reach the level they were satisfied with. Thus, the Chapter representatives proposed to organize the seminar in such a way that the emphasis is laid upon clear and well-structured presentations rather than new research results.

Naturally, the speakers wanted to improve their presentation skills – to this end, we created feedback forms that were given to speakers after each talk.



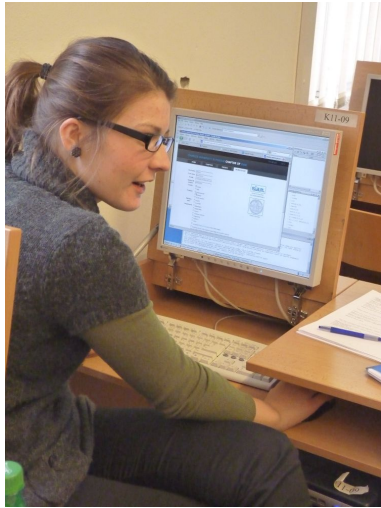
During the semester, eleven speakers specializing in different topics and also being in different stages of their study presented their work – we had talks on numerics as well as talks on physics and talks on parts of mathematical analysis. Moreover, some of the students were only studying towards their M.Sc., while some were about to complete their Ph.D. Nevertheless, all talks were easy to understand since all the speakers really had the clarity of the presentation at heart.

The participants of the seminar were only students. No faculty staff attended the seminar, which had a very positive effect on the amount of discussion. Nobody was too shy to ask “stupid questions” and in discussions we learned many things.

In conclusion, the atmosphere during the seminars was very friendly and relaxed. The Chapter tried to support this by providing small snacks and refreshments. The seminar will be renewed next year and we managed to negotiate a fixed place in the schedule of the faculty.

2 Introduction to Programming in Matlab

Frequently, students who decide to specialize in disciplines of applied mathematics are asked to do some programming work. It is often up to them which programming environment they decide to choose. During her stay at ETH Zürich, Marie Michenková has learned that, surprisingly, the very convenient environment of Matlab is not used in Prague very often.

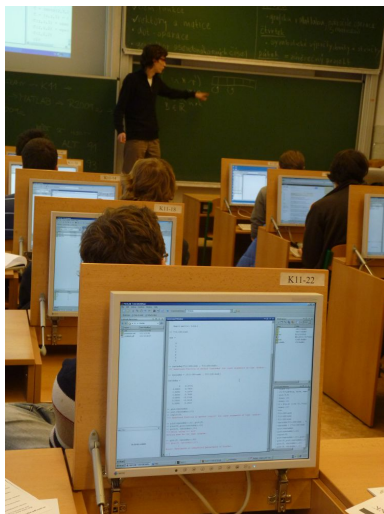


Thus, she decided to organize jointly with her colleague Jan Papež a workshop for undergraduates to introduce them to Matlab. When they both joined the SIAM Student Chapter at the Charles University in Prague, it seemed natural to them to organize the workshop as an activity of the Chapter hoping for support through the Chapter. The Chapter committee, of course, appreciated their enthusiasm and helped them with an easy access to computer labs, intensive promotion of the workshop, and provided refreshments and small presents for attendees of the workshop.

The resulting workshop “Introduction to Programming in Matlab” was a five-day intensive programming course originally intended for approximately 15 undergraduate students of mathematics and physics. However, the interest in the workshop with 22 participants, out of which two thirds were graduates, was even higher than expected.

The aim of the course was set to give a brief introduction to the theoretical aspects of programming in Matlab including the applications and possible alternatives to this commercial tool. However, the majority of the classes were spent on solving real-life problems in Matlab in a clever way.

Since the response from students to this project was more than positive, we are certain that they will benefit from the course in their future studies. So will Marie and Jan, who have improved their teaching and organizing skills. Thus, Marie and Jan offered to hold the workshop again next year or in two years, which is appreciated by the Chapter’s advisors as well as students who could not participate in the workshop this year.



3 Presentation of Karel Janeček

Already when writing a letter of intent to establish a Student Chapter at the Charles University in Prague, the founding student members identified awakening enthusiasm of undergraduates for applied mathematics as one of the main goals of the Chapter. We believe that one way to do so is to organize a meeting of students (as well as faculty staff) with high profile personalities who have been very successful in his/her career connected to mathematics.

Promptly, Dr. Karel Janeček, MBA came to our mind, the founder of RSJ algorithmic trading, being one the leading algorithmic traders in London with an impressive revenue of several billion dollars. Karel Janeček has recently become well-known also to the general public in the Czech Republic because of his Endowment in Support of Science and Research.

Although neither the Chapter members nor our advisors knew Karel Janeček in person, we contacted him and he readily agreed to give a lecture. We believe that the background of the strong and respected society SIAM was a great help. Our initiative was also appreciated by the faculty management who included Karel Janeček's talk into a series of events celebrating the 60th anniversary of the Faculty of Mathematics and Physics; see <http://www.mff.cuni.cz>.



We did expect that the lecture of Karel Janeček would be appealing to students as well as faculty members. The number of people attending the lecture, however, reached as much as 120 which exceeded any expectations. Even Karel Janeček himself was flattered and touched by the spontaneous applause of the crowd following his introduction by the Student Chapter President.

During his 60-minutes long talk, Karel Janeček explained how algorithmic trading works and how the knowledge of mathematics can help to improve the algorithms and thus opens the road to success. He did not forget to mention how important, in his opinion, the synergy of academia and industry is and also stressed the importance of social respon-

sibility of market traders.

A large number of students did not want to miss the opportunity to ask Karel Janeček questions on how he started his business; who, in his opinion, was to blame for the financial crisis and on the Tobin tax. When asked about where his employees were residing, he placed Prague into the center of his worldwide activities, which made many people proud of their home.

After his lecture, many students were filled with enthusiasm for applied mathematics and hoped to build up a similarly successful company in the future. The first step into this direction might be to become a student of Karel Janeček who really means his word on synergy between academia and industry.



4 Presentation and promotion of the Chapter

Shortly after establishing the Chapter in the summer of 2011, we understood that its presentation to our co-students as well as the academic community would be a crucial ingredient to its success.

The first task we identified, was to set up a graphically appealing homepage containing the most relevant information about the Chapter as well as current Chapter events. Within this task we succeeded in negotiating with the University management to obtain a short and easy-to-remember web address <http://siam.cuni.cz> where our current homepage is hosted. Moreover, in addition to the basic information on the Chapter, we started to post information on various conferences, summer schools and internship opportunities for students on our homepage. We hope, that our web-page will become the largest database of such opportunities on campus. This will not only serve the Chapter purpose, but it will also increase the awareness of the Chapter and attract new members. Further, a unified graphics used for all Chapter materials such as posters, invitations and leaflets as well as a Chapter logo, that would help to recognize the Chapter as the organizer of its events, would contribute to the same purpose.

To this end, the elected President for the academic year 2012/13, Jan Papež, designed a logo of the Chapter, as well as its graphics including the fonts and colors used by the Chapter. We attach some of our posters to give a better idea.

Of course, before every event, we distribute posters around campus to inform students and academic staff about it. We could even negotiate with lecturers of the main courses on campus to spend some minutes of their lecture on advertising our events, this type of promotion proved to be very effective.

The only thing we have been missing during our events is that the organizers and Chapter members were not easily recognizable for the participants. We have, therefore, bought T-shirts with the Chapter logo on them to resolve this issue in future.

Furthermore, we have succeeded in presenting our Chapter in the media. The first article, which was written about starting our Chapter, was published in the magazine “Pokroky matematiky, fyziky a astronomie” (see http://www.cs.cas.cz/hanka/pmfa/4_11/zpravy.pdf) distributed to the members of Czechoslovak Union of Mathematicians and Physicists. In particular, a lot of the academic staff at our faculty and also high-school teachers read the magazine. We invited journalists from the magazine of the Charles University “iForum” to the lecture of Karel Janeček and an article on this event was published (see <http://iforum.cuni.cz/IFORUM-12470.html>).

We believe that our strong promotion of the Chapter has been successful and that a majority of the students of mathematics on campus have realized that the SIAM Student Chapter is active at our University. However, there is a space for improvements. For the future we plan to create posters about the Chapter that can be used on conferences and to incorporate more web 2.0 features.



SIAM SC logo

SIAM Student Chapter
Charles University in Prague

Knowledge is nothing if not shared

Komise Charles University in Prague Chapter of SIAM si Vás tímto dovoluje pozvat na oficiální představení chapter, které se bude konat

5.12. v 17:00 v posluchárně K1.

Chapter vznikla zejména za účelem posílení vazeb mezi studenty aplikované matematiky a navazání kontaktů s lidmi z praxe.

Těšíme se na Vaši účast

siam.karlin.mff.cuni.cz

SIAM Student Chapter
Charles University in Prague

Knowledge is nothing if not shared

SIAM Student Chapter
cíle
vytvření a posílení týmů mladých studentů aplikované matematiky, rozvoj v rámci Matfyzu
navazování kontaktů a vzájemné seznámení s lidmi z praxe a současným vědeckým pracovníkem
vlastní propagace aplikované matematiky

SIAM
mezinárodní organizace sdružuje jak z odborníků, tak studentů ze všech vědních oborů, zejména těch, kteří studují

posílání
výběr a editace matematiky a vztahující se k ní
podpora lektorů a studentů, sdělování informací a vztahů
podpora mostů mezi studenty a lidmi z praxe

nástroje k realizaci posílání
posílání materiálů a knih
podpora lektorů a studentů
podpora lektorů a studentů
podpora lektorů a studentů

výhody členství ve Student Chapter
podání přednášek a knih, čím se sdělování informací studentů
podání přednášek a studentů lektorů a studentů
podání přednášek a studentů lektorů a studentů
podání přednášek a studentů lektorů a studentů

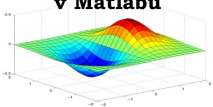
výhody členství v SIAM
sdělování přednášek SIAM News a SIAM Review
50% sleva na knihy SIAM
50% sleva na přednášky elektronických časopisů
sleva z registračního poplatku na konferencích pořádaných SIAM

více informací a přihlášky na siam.karlin.mff.cuni.cz

SIAM Student Chapter
Charles University in Prague

Knowledge is nothing if not shared

Úvod do programování v Matlabu



kurz pro začátečníky předvedl studenty 3. ročníku numeriky a modelování ale i další sejmene

13. - 17. února vždy 9:00 - 12:00 v počítačové laboratorii v Karlíně

seznámíte se s Matlabem, naučíte se používat vestavěné funkce i psát své vlastní, zjistíte, jak vyřešovat a ukládat výsledky, provedete vše k předložení a efektivnímu kódu a předvedl si vše sami hned vyzkoušíte

více informací: www.papez.org/matlab
kontakt: jancipapez.org
přihlášení: e-mailem do 5. února

SIAM Student Chapter
Charles University in Prague

Knowledge is nothing if not shared

Doktorandský seminář

Co to je?
Seminář určený nejen pro studenty vyšších ročníků aplikované matematiky, který probíhá jednou za 14 dní v úterý od 16:00 v Respiaru.

Proč přijít?
Na rozdíl od jiných seminářů je důraz kladen na kontakt s účastníky a srozumitelnost.

Proč přednášet?
Na závěr každého semináře poskytnou účastníkům přednášejícímu zprávu vau (to by měl vyznat, co mluvíte vyvětit podobně) a podobně.

siam.karlin.mff.cuni.cz

SIAM Student Chapter
Charles University in Prague

Knowledge is nothing if not shared

Letní semestr se blíží a s ním i **nové akce** SIAM Student Chapter! Pořádáme pro Vás hned **dvě přednášky** zaměřené na **aplikaci matematiky v ekonomii**.

Startujeme již první den semestru!

20.2. 18:00 **CERGE-EI**

Filip Matějka předatví CERGE-EI a jejich výzkum, v diskuzi poté zodpoví Vaše dotazy

Pokračujeme týden na to...

27.2. 16:00 **RSJ** **algorithmic trading**

Karel Janeček z RSJ algoritmic trading vysvětlí, jak pomocí matematických modelů vydělá při obchodování na burze

obě přednášky v posluchárně K1

více informací na siam.karlin.mff.cuni.cz

SIAM Student Chapter
Charles University in Prague

Knowledge is nothing if not shared

SIAM Student Chapter zve na přednášku pořádanou u příležitosti oslavy 60 let od založení MFF UK

Karel Janeček
RSJ algorithmic trading
pondělí 27. února od 16:00 v K1



Chcete se dozvědět, jak se používají matematické modely při obchodování na burze?
Chcete se setkat s úspěšným absolventem MFF UK, který založil a řídí firmu a ročním obrátem 2 879 000 000 000 Kč?

Algoritmic obchodování (Algorithmic trading) znamená řídit jako „black-box trading“, je ověřit splnění významné infrastruktury pro automatické rozhodování. Jan Janeček, náš úspěšný absolvent, se zabývá právě touto problematikou. Sdílejte své zkušenosti obchodování jako tržní obchodník a sdílejte své vlastní obchodování algoritmického tradingu.

siam.karlin.mff.cuni.cz

SIAM Student Chapter
Charles University in Prague

Knowledge is nothing if not shared

SIAM Student Chapter zve na setkání s absolventem

Jan Slavík
ŠKODA AUTO a.s.
čtvrtek 26. dubna od 17:20
posluchárna K1



Chcete se dozvědět, jak se aplikují matematické modely v automobilovém průmyslu?

Chcete se setkat s absolventem numerické matematiky na MFF UK s 14ti letou praxí v průmyslu?

45 min. přednáška + 15 min. diskuze se studenty

siam.karlin.mff.cuni.cz

SIAM Student Chapter
Charles University in Prague

Knowledge is nothing if not shared

SIAM Student Chapter slaví **1. narozeniny** a pořádá

VÝROČNÍ SETKÁNÍ
úterý 22. května od 17:20
posluchárna K1

Co nás čeká:

- Zhodnotíme činnost v uplynulém roce
- Zvolíme si novou komisi
- Nastíníme další směřování



Vitání jsou všichni členové i příznivci Chapter

siam.cuni.cz

Posters