The Cooper Pioneer: Where are you originally from?
Maxim Marienko: I am from Russia. I was born in Omsk but I got all my degrees in Moscow where I moved at the age of 17. I graduated from Moscow Institute of Physics and Technology (Phystech), one of the most selective and arguably the best physics school in Russia.

I got my PhD from another excellent place – Kapitza Institute for Physical Problems. I’ve been specializing in theoretical condensed matter physics – superconductivity, superfluidity, quantum liquids and gases, and high-temperature superconductors, physics of correlated electrons and complex quantum phenomena in general.

TCP: Why did you choose physics?
MM: Because I love it and I have a passion for it. Physics is the most fundamental of natural sciences, and it teaches us to think and to understand the world around us. I love questioning how things work, I like the idea that my research is making a contribution to world of knowledge. I like to solve problems.

It is the analytical thinking that physics develops that helps you with everything, not textbook problems – everything. And I really enjoy teaching and sharing my knowledge, it is a very rewarding experience.

TCP: Which university or research lab was (or is) the most exciting place to work?
MM: I’ve been working at several universities. I went for a postdoc at the University of Sherbrooke in Quebec, Canada. That is a great place for a condensed matter physicist and I learned a lot being there. I love it here in NY. With many universities around, there is a huge potential for learning, exchanging ideas, communicating with best researchers. My PhD years back in Moscow were absolutely great.

That was the first time I’ve got an experience working in a real research group, at a famous institution, wondering, discovering and publishing. The atmosphere was amazing – I probably didn’t have that anywhere else. And I love it here at Cooper. I love the students and their attitude. I feel that they are very energetic and many of them are trying to do more than just simply attend lectures, do the homework and pass the course. It reminds me of my years at Phystech, too.

TCP: What is your role in Cooper? What is your department’s role in Cooper?
MM: This is my 2nd semester here. I started with a recitation section. This semester I’m very excited to teach [the] lecture course of modern physics. It is a big class, and that is always a challenge, but it’s so exciting to teach such a complicated subject. I am enjoying doing that – working on my lectures, being in a classroom, trying my best to explain and I hope it works for students!

TCP: What brought you to Cooper Union?
MM: I knew Cooper is an excellent school and heard many good things about it. I thought, “I want to teach a course here,” and I am very glad that at some point it became possible!

TCP: Do you have a favorite professor or colleague at Cooper?
MM: So far I’ve been working with Prof. [Alan] Wolf and with Prof. [Partha] Debroy. It’s going very well so far, and I look forward to meeting with other Cooper faculty members.

TCP: What are some of your hobbies?
MM: Black and white traditional film photography, skiing, and mountain biking, if you wanted me to name three of them.

I am a big fan of black and white street and abstract photography. I do all the stages of it, including developing and printing in the dark room, even though I don’t have much time for it now. I like the style of Magnum photographers, Cartier-Bresson, Joseph Koudelka, Mary Ellen Mark, Robert Frank, Ralph Gibson – the list is long actually. I’ve been very pedantic about a composition which is often hard to have in a street scene. You never think about the moment when you press the shutter button.

TCP: What are some of your favorite things about Cooper?
MM: To be creative. To use their own initiative. Know your goals and be focused on them, but always try to invent something new in your life. Use your time at Cooper wisely. And once again, be creative.

You just do it when you feel everything in the viewfinder is at the right position. If you think, you will be a split second late and everything will change. So for me it’s some kind of sport, too.

I do mountain biking in the summer and I ski a lot in the winter. I enjoy challenging terrains, bumps, moguls, trees. And I am glad to share my passion with many friends from whom I can learn too. After all, skiing is a social sport.

TCP: What advice would you give to Cooper students?
MM: To be creative. To use their own initiative. Know your goals and be focused on them, but always try to invent something new in your life. Use your time at Cooper wisely. And once again, be creative.

You can find more information about Maxim Marienko on the Cooper Union website: pioneer.cooper.edu.

KenKen

KenKen is a Japanese puzzle game invented by Tetsuya Miyamoto, similar to Sudoku. It involves both math and logic, and is solved by filling in the grid with numbers that satisfy certain constraints.

Instructions: Like Sudoku, each row and column must contain the numbers from 1 to 6. The number in the upper-left corner of the bolded shape made up of squares is the number you need to get by using the operation next to the number. For example, the “6x” rectangle in the bottom left corner can be filled in with a 3,2; a 2,3; a 1,6 or a 6,1.

The unique solution to the last issue’s puzzle is reproduced below. This puzzle contains only one solution, which will be released in the next issue.

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Cryptoquote

A Cryptoquote is an encoded quote. It is encoded such that each and every occurrence of a letter is substituted with a different letter of the alphabet. Using ciphers such as frequency of occurrence and placement, the original quote can be found. For instance, the word XBDIKCXXBZ could be deciphered to reveal the word LONGFELLOW.

"MDAS A NxLwGpBH SDln, SX Og QNLwQXeiX E nXLwGp MDS AdGJ JXQjHJE E LGM TPqYGu VWx." — MXNWU AHHGIL

Last issue’s solution:
"NIETZSCHE CLAIMED THAT HIS GENIUS WAS IN HIS NOSTRILS AND I THINK THAT IS A VERY EXCELLENT PLACE FOR IT TO BE." — FEDERICO Fellini

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ON THE ART OF PROTESTING

ANNA VILA (A '15)

I was in St. Marks Market getting a sandwich after the [deferred art students] rally and I saw a member of the Cooper Union custodial crew walking by with a sign that said, “We’re not going to be turned upside down like mine was, and I want their minds to be changed too.”

Which I totally understand. But does that imply that because everyone has it bad, it’s ok? Are we supposed to just sit down and take it? Should we just believe the lies that we’ve fed and do nothing because life sucks and we might as well deal with it, since we’re just “spoiled and entitled brats”? Hell no. Are we spoiled and entitled for looking out for future kids and trying to ensure that they have a great future?

I don’t see how spending countless hours, out of pocket, and a whole lot of effort and planning could be seen as selfish. When I listened to those kids speak [at the rally], I realized just how much I care about all of them, and the kids that will replace them, and the kids after that.

I want them to have a fucking beautiful college experience and education, and I want them to come to Cooper and I want them to learn amazing things. I want to get to know them and talk to them about art and life and become life long Cooper alum buddies with them. I want them to grow, and change, and find out about themselves that they never knew existed. I want their entire lives to be turned upside down like mine was, and I want their minds to be blown every single day like my mind is. I love this school and I love my teachers and I love my classmates and I love my future classmates and goddamn it, I’ll do everything I can to make sure that there will be future-classmates to have.

During the week of action back in December, we received so many letters of solidarity from student activist movements from all across the country and the world. It was beautiful. Solidarity is an amazing thing… You have all these kids somewhere, out there, and you don’t even know them but the mere fact that they exist becomes a motivation. And let’s not forget the fact that this is happening everywhere. Being part of a student solidarity network is important because it just makes you realize that you’re not alone.

The Cooper Pioneer: Can you describe your new role as head of Datatel?

Brian Cusack: In short: it is my job to see that we use the software to its optimal potential. This breaks down to a number of responsibilities; some are short term and some are long term. We are “live” on most of the modules within the system, but there are still some departments that are working through migrations.

In the short term, it is my job to oversee the successful migration of the remaining modules and deployment of the remaining software applications. Longer term I will be working with user areas to prioritize the needs of the institution and coordinate modifications or enhancements as necessary. I am responsible for developing training programs and documentation so we can implement best practices throughout the institution.

Implementing an integrated software package like Datatel is a large undertaking, but the process allows for two important reflections:

• Locking outward - what new features does the software provide our procedures?
• Locking inward - how can we improve our procedures gain the most from the software?

A technique to make sure we make the most of opportunities both of those questions present.

TCP: Why did Cooper decide to implement Datatel?

Brian Cusack: In 2008, Cooper performed a Self-Study in preparation for the decennial Middle States accreditation visit. In 2009, the Information Technology (IT) Committee was convened as specified by the Self Study. This committee was again formed by individuals from throughout the institution: faculty, administration, staff and students.

The committee visited other campuses, went to conferences, and discussed the needs of Cooper Union. In 2010, the committee submitted its final report. While its conclusions were many and varied, there was one clear overarching recommendation: In summary, Cooper Union must install a web-based integrated enterprise wide system that encompasses all elements of the delivery of a high-quality Cooper Union education. Such a system will include modules that address finance, student, human resources, institutional advancement, advisement, course management and room scheduling.

The ideal system will be modular in that each component can be implemented on a standalone basis and integrated as additional modules are implemented.”

Prior to 2011, The Cooper Union housed its data in siloed systems. Each department had its own management system and data warehouse which were selected at random times over the last 30 years. This led to many diverse systems across campus, many of which became problematic to reconcile.

In the late fall of 2010, Cooper Union began researching companies that could fit the requirement put forth by the IT Report. All sorts of programs were researched – but most were too big for us, like the very popular Banner. The field of choices was quickly narrowed to two candidates: Power Campus by Sungard HE and Columbine by Datatel.

Booth companies came on campus and presented to stakeholders throughout the institution. At the end of the presentations, feedback from the stakeholders was considered, and Datatel was chosen as the integrated enterprise system for Cooper Union.

TCP: How has Cooper benefited from Datatel?

BC: Cooper is already seeing the benefits of Datatel. Some of these include:

• Data integrity and consistency. For example: when a department looks up the address of a student – every department will get the same address. This sounds simple, but with separate systems it was not unusual for something as simple as an address to vary greatly depending on which department you asked.

• Web-based access: among other actions, students can now register online (I know that was a big deal for the students). Professors have access to advisement tools they never had before.

• The business office has modern reporting tools they never had before.

• We are implementing scheduling software that will help us make the most of our limited space and resources.

TCP: What has been the most difficult aspect of Datatel to work with?

BC: I’ll give you two; change and workload.

Change is always hard. We are changing from diverse systems that were largely custom designed for individual tasks to an integrated system that is designed to work for everyone. Getting what you need (individually) from a system designed for everyone requires a bit of patience. Some individual systems are so simple that they were here before; however, they will be far more accurate in their results.

The added workload of training and migration is significant. We couldn’t stop running the school just so that everyone could be trained on the new system and work through the arduous task of migrating data from the previous systems. Many individuals have had to continue fulfilling their full time responsibilities while somehow fitting in the training and migration needs. It has been tremendously taxing on everyone but the dedication of the Cooper staff has been nothing short of miraculous.

Neither of these difficulties are unique to Datatel. They can be expected from any mass-data-migration. For their part, the consultants and technical support team at Datatel has been extremely helpful.

TCP: Do you have any advice for students, professors, or staff members who are still trying to fully transition to Datatel?

BC: Please be patient but don’t be afraid to share questions or comments. We are all learning and training as we go. If you have concerns, don’t be afraid to ask. If something is confusing – let me know; one of my new responsibilities is to coordinate documentation and training.