

EMS Conference
Emil Artin International Conference

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Yerevan, Armenia

On the last week of May, COINS supported me to attend the *Emil Artin International Conference*. The conference, held in Yerevan, capital city of Armenia, was dedicated to the 120th Anniversary of Emil Artin (03.07.1898 - 20.12.1962), worldwide known US mathematician with Armenian roots.

The conference was organized with the goal to provide a forum where specialists will meet to share ideas of latest research in Algebraic Structures, Mathematical Logic, Number Theory, Pure and Applied Mathematics, Computer Science. All these areas benefited indeed from Artin's outstanding results.

Among the topics treated in the conference we can find the following ones:

- classical and non-classical algebraic structure,
- algebra and logic number theory,
- geometry and topology, analysis and equations,
- boolean and De Morgan functions, cryptography and discrete mathematics, applied mathematics,
- lattices, universal algebra, computer science and IT,
- Artin L-functions, dynamical systems,
- quantum information theory, quantum logic and quantum computation, quantum groups and quantum quasigroups.

Around one hundred people attended the conference, coming from all over the world. Among those there were also *Efim Zelmanov*, from the University of California, San Diego (USA), who won a Fields medal in 1994 (the equivalent of a Nobel price for mathematicians). In his talk ("Groups satisfying

polynomial identities”) Zelmanov gave an introduction of pro-unipotent and pro- p groups that satisfy an identity.

Another interesting talk was given by László Szalay, from the Department of Mathematics and Informatics, J. Selye University, Komarno, Slovakia. The title of his talk was “Algorithm for solving the equations $2^n \pm \alpha \cdot 2^m + \alpha^2 = x^2$ ” and he explain a bit of this interesting field that is number theory, where something that seems so easy and trivial it can be completely the opposite.

Another fascinating talk was given by Yuliya Zelenyuk, from the University of the Witwatersrand, Johannesburg, South Africa. She talked about “Counting symmetric bracelets”. An r -ary bracelet of length n is an equivalence class of r -colorings of vertices of a regular n -gon, taking all rotations and reflections as equivalent. A bracelet is defined symmetric if a possible corresponding coloring is invariant under the action of some reflection.

In general the conference was really interesting and it was focused on mathematics and its theoretical aspects. My research has a lot to do with mathematics and I think this conference gave me the opportunity to have a taste of the areas that have a connection with my field. For this reason I am grateful to COINS that allows me to attend the conference in Armenia. Moreover, it was my first time in this beautiful country!

