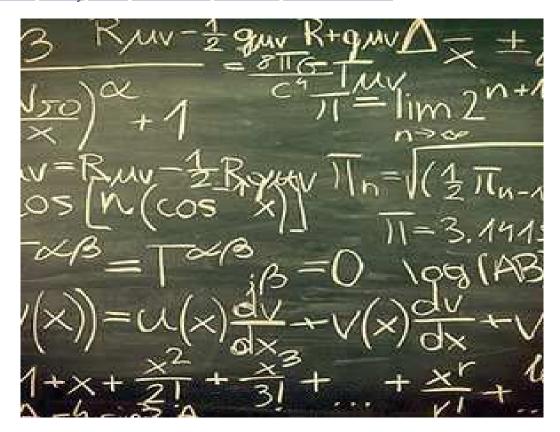
## "Outstanding Women Mathematicians at a Conference in the Memory of Nikolai Chernov".

por Eleonora Catsigeras

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# Outstanding Women Mathematicians at a Conference in the Memory of Nikolai Chernov

During the month of May, a conference was held in memory of one of the most distinguished mathematicians in the world: Prof Nikolai Chernov. Entitled « A dynamical systems, ergodic theory and probability conference », the event, organised by the Department of Mathematics of the University of Alabama at Birmingham, gathered mathematicians from around the world to share their research. DiscovHER takes this opportunity to feature Dr Eleonora Catsigeras, an Uruguayan mathematician working on dynamic systems who participated in the conference.

#### The importance of creativity

Eleonora Catsigeras is a Doctor in Mathematics and Engineering, working as a Grade 4 Mathematics teacher at the « Facultad de Ingeniería de la Universidad de la República », in Uruguay. When thinking about her opinion of maths, and how she got interested in the discipline, Eleonora states:

Being creative is essential for maths! My first approach to science was in school, where I remember my sixth grade teacher being original with the math problems she made me solve. This is when I discovered there was a place for creation in mathematics!

#### Studying neurodynamics through a multidisciplinary approach

Her research, conducted in the field of dynamic systems, focuses on a project called « Neurodynamics ». She attributes part the project's success to the fact that she works with a multidisciplinary team made up of mathematics, physicists, engineers, and neuroscientists. The goal being to discover new theorems, demonstrating results through rigorous logical deductions.

Neurones are part of a neural network, and they can be modelled through equations and functions that help interpret their behaviour. This models can also be applied to dynamic things, such as the interactions between different human communities, and the development of artificial intelligence systems, as well as to biology.

#### Other women speakers in the conference were:

- -<u>Alena Erchenko</u>, a Russian graduate student working on dynamic systems in Penn State University, USA
- -<u>Hongkun Zhang</u>, a Mongolian Associate Professor at the Department of Mathematics & Statistics of the University of Massachusetts, USA.
- -<u>Maria Fátima Correia</u>, from Cape Verde, is an Assistant at the Department of Mathematics of Evora University, Portugal.
- -Nsoki Mavinga, from Congo, is an Assistant Professor at the Department of Mathematics and Statistics, of Swarthmore College, USA.
- -Hui Ma, from China, is an Assistant Professor at Black Hills State University, USA.

#### DiscovHER congratulates all these brilliant women mathematicians!

Dr Eleonora Catsigeras won <u>Uruguay's L'Oréal-UNESCO For Women in Science</u> Fellowship in 2014.

### **Further reading**