Nikita Kalinin

CONTACT INFORMATION	*E-mail :* Nikita.Kalinin@unige.ch, nikaanspb@gmail.com *WWW :* www.mathcenter.spb.ru/nikaan
CITIZENSHIP STATUS	Date and place of birth : May 6, 1988, Russian Federation Citizenship : Russia
INTERESTS	Tropical geometry, algebraic geometry, algebraic topology, combinatorics, number theory, education.

EDUCATION

Université de Genève, Section de mathématiques, Geneva, Switzerland

Ph.D. Student, March 2011 (expected graduation date : March 2016)

- Thesis topic : "Tropical contact geometry"
- Advisor : G.Mikhalkin

St.Petersburg Department of V.A.Steklov Institute of Mathematics of the Russian Academy of Sciences, St. Petersburg, Russian Federation

Ph.D. Student, October 2010 - 2013

- Thesis topic : "Approach to smooth structures on 4-manifolds via loop spaces"
- Advisor : O.Ya.Viro

St.Peterburg State University, St. Petersburg, Russian Federation

Master degree (Specialist), Math, June, 2005-2010

High school 239 specialized in Physics and Mathematics, St. Petersburg, Russian Federation

Student, 2003-2005

HONORS AND AWARDS	Gold medal at the International Mathematic Olympiad in Mexico, 2005 Silver medal at the SEEMOUS olympiad in Cyprus, 2007
INDUSTRIAL EXPERIENCE	**GGA Software**, St. Petersburg Programmer and mathematician, 2008 - 2011. I used to develop software on Java, C++, Python, etc ; and consulted programmers about statistics and biology.
LANGUAGES	English and French – working proficiency, Russian – mother tongue.

TEACHING EXPERIENCE

Geneva University, Geneva
Analyses 1, Complex Analysis (assistant ; in French) (2012)
Characteristic classes (assistant ; in English) (2013)
Méthode élémentaire (responsable ; in French) (2014-2015)
Méthode élémentaire (for the program Athena : about 40 school students joined the course for about 15 3rd year students) (2015)

PhysMathClub, PDMI, St. Petersburg, Russia
"Introduction to tropic geometry", 2007
"Differential topology" 2010

High school 239 specialized in Physics and Mathematics, St. Petersburg
Tutor of math circle, 2005 - 2011

Organizer of St.Petersburg math tournament for junior schoolchild, 2006-2010

PAPERS   N. Kalinin, The Newton polygon of a planar singular curve and its subdivision, Journal of Combinatorial Theory, Series A, 137, 226 - 256, 2016.

N. Kalinin, The Alexander polynomial as an intersection of two cycles in a symmetric power, Journal of Knot Theory and Its Ramifications, Vol. 24, No. 12 (2015), 1550061.

N. Kalinin, Construction of the Alexander polynomial by braid action on the homology of some local system (in Russian) `http://mathcenter.spb.ru/nikaan/diplom.pdf`.

N. Kalinin, Tropical approach to Nagata's conjecture in positive characteristic, arXiv :1310.6684

N. Kalinin, M.Shkolnikov, Tropical curves in 2-dimensional sandpile model, arXiv :1502.06284

N. Kalinin, M.Shkolnikov, Sandpiles on the heptagonal tiling, arXiv :1509.00654

N. Kalinin, A guide to tropical modifications, arXiv :1509.03443

INVITED TALKS   13.12.2013, " Tropical approach to Nagata's conjecture", Seminari de Geometria Algebraica Universitat de Barcelona/Universitat Politécnica de Catalunya.

18.03.2014, "Tropical approach to Nagata's conjecture in positive characteristic", Complex-algebraic aspects of tropical geometry, Centre Interfacultaire Bernoulli, Lausanne.

11.04.2014, "Tropical geometry in questions around Nagata's conjecture", Séminaires de l 'équipe Géométrie, Université de Savoie.

13.02.2015, "Tropical geometry in Nagata's conjecture and sandpile models", colloquium talk, CUSO, Lausanne.

30.03.2015, "Tropical legendrian curves", Tropical Geometry in Europe, Technische Universität Berlin.

18.11.2015 "Tropical curves in sandpiles", Sandpile groups, Oaxaca, Mexico.