TATIANA SAVRANSKAIA

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QUALIFICATIONS

Université de Paris (Institut de Physique du Globe de Paris)

Doctorate in Science of the Earth and Environment

Paris, France Jan.2017 - July 2020

Tyumen, Russia

Tyumen State Oil and Gas University

Joint master program with IFP School: Master of reservoir engineering:

"Modelling of oil and gas field development"

Sep.2013 - June 2015

IFP School (L'institut Français du pétrole)

Master of science in reservoir Geosciences and Engineering

Rueil-Malmaison, France Jan.2014 - Dec. 2014

Tyumen State Oil and Gas University

Mining engineer with specialisation in Geology of Oil and Gas

Tyumen, Russia Sep.2008 - June 2013

CAREER

Ludwig Maximilian University of Munich

Post-doctoral researcher, Individual DFG research Grant

Munich, Germany

Feb.2024 - Present

- Disentangling discrete magnetic components contributing to NRM and to RPI normalizers through laboratory experiments and modelling
- Estimation and modelling of locking depth of individual RPI components
- Evaluating of mechanisms of magnetic remanence acquisition by biogenic and detrital magnetic minerals
- Improving relative paleointensity estimates through cosmogenic (¹⁰Be) and component specific RPI records

Helmholtz-Zentrum Potsdam - Deutsches GeoForschungsZentrum GFZ

Post-doctoral researcher, Alexander von Humboldt Fellowship

Potsdam, Germany Feb.2022 - Feb.2024

- ullet Assessment of environmental and geomagnetic controls of sedimentary $^{10} {
 m Be}$ data
- Assessment of environmental and geomagnetic controls of RPI records
- $\bullet \;$ Integration of $^{10} \mbox{Be} \backslash ^9 \mbox{Be}$ into global geomagnetic field model

Institut de Physique du Globe de Paris - Universitè de Paris

PhD candidate, EDIFICE ERC project

Paris, France

Jan.2017 - July 2020

- Analysis of global synchronism of cosmogenic ¹⁰Be variations in marine sediments. Assessment of magnetic and non-magnetic (environmental) contributions
- Dipole moment reconstruction using sedimentary ¹⁰Be/⁹Be records
- Identification of sedimentary impulse response function of marine sediments using the microtektite distributions
- Modelling the delayed response of magnetic signal within marine sediments with pDRM function

Institut de Physique du Globe de Paris - Université de Paris

Technical assistant, EDIFICE ERC project

Paris. France Jan.2016 - Jan. 2017

- Carrying out laboratory magnetic measurements
- Data analysis and treatment
- Estimation of relative paleointensity and field direction

Tyumen State Oil and Gas University

Specialist and teaching assistant

Tyumen, Russia

Sep.2013 - July 2015

- Teaching the practical course of "Fundamentals of reservoir engineering"
- Managing the e-learning system

Beicip-Franlab Intern in the software department

Rueil-Malmaison, France July 2014 - Dec. 2014

- Development of fractured reservoir models
- Simulation of well testing on fractured reservoirs
- Sensitivity studies

V.I. Shpilman Research and Analytical Centre for the Rational Use of the Subsoil

Intern-geologist in the department of West-Siberian exploration works

March 2012 - Sep. 2013

- Construction of geological sections
- Well to well log correlations
- Development of english version of research center's website

Tyumen, Russia

PRESENTATIONS AND CONFERENCES **Geophysical Lunch Time Seminar** Munich, Germany Oral presentation, invited talk Jan.2025 **18th Castle Meeting** Utrecht, Netherlands Poster presentation Jul.2024 Cologne, Germany Cosmo-2024 Poster presentation May.2024 Niederlippach, Germany **DGG Meeting-2024** Oral presentation, invited talk May.2024 IUGG-2023 Berlin, Germany Poster presentation Jul.2023 MagNetz seminar **Magnetz Online Network** Invited talk Jul.2023 https://www.youtube.com/watch?v=AHqbl1MBmWc EGU-2023 Vienna, Austria Poster presentation Apr.2023 Herbstschule "System Erde", GFZ Potsdam, Germany Oral presentation, invited talk Nov.2022 17th Castle Meeting Trakošćan, Croatia Poster presentation Aug.2022 Network Meeting of the Alexander von Humboldt Foundation Rostock, Germany Poster presentation Apr.2022 Geomagnetism Research Group's Seminar Potsdam, Germany Oral presentation Apr.2022 Geophyscs Research Group's Seminar (LMU) München, Germany Oral presentation Dec.2020 San-Francisco, USA AGU fall meeting Poster presentation Dec.2019 XXV Russian conference on the issues of paleomagnetism and rock magnetism Moscow-Borok, Russia Invited talk Sep.2019 Congrès des Doctorants Paris, France Popularised talk March 2019 International Conference and School "Problems of Geocosmos" St.-Petersburg, Russia Oral presentation, invited talk Oct.2018 Congrès des Doctorants Paris, France Oral presentation March 2018 **AGU fall meeting** New Orleans, USA Poster presentation Dec.2017 PMAG-2017 Toulouse, France Oral presentation Sep.2017 **Congrès des Doctorants** Paris, France Poster presentation March 2017 FELLOWSHIP AND AWARDS The LMUexcellent Postdoc Support Grant Munich, Germany Ludwig Maximilian University of Munich March.2025 **DFG Individual Research Grant**

Potsdam, Germany

Feb.2022-Feb 2024

Potsdam, Germany

Feb.2022-Feb 2024

within Priority Programme "Reconstructing the Deep Dynamics of Planet Earth

Alexander von Humboldt Research Fellowship for Postdoctoral Researchers

Ludwig Maximilian University of Munich, Magnetism Group

over Geologic Time (DeepDyn)"

GFZ Geomagnetism group

Institut de Physique du Globe de Paris - Université de Paris Paris, France International mobility program award

Fellow of doctoral school ED560 (IPGP) for ZAMG (Vienna, Austria) Institute visit during 2 month

Institite for Rock Magnetism, University of Minnesota Minneapolis, USA

Avr.2019-May 2019

Nov.2022

Fellow of IRM institute:

Summer school in Rock Magnetism (SSRM) 2018 June 2018

New Orleans, USA AGU fall meeting

Winner of Outstanding student paper award competition Dec.2017

SHORT COURSES

Media Training For Researchers - The Basics of Science Communication Potsdam, Germany Heinrich Heine University Düsseldorf Sep.2022

Short course on the use of magnetic susceptibility in Earth Sciences Trakošćan, Croatia Castle Meeting conference Aug.2022

Summer School For Rock Magnetism Minneapolis, USA

IRM Institute June 2018

TEACHING AND MENTORING EXPERIENCE

Teaching "Geo- and Paleomagnetism" course for Master Students Munich, Germany

Ludwig Maximilian University of Munich June 2025

Mentorship of a Master Student in Magnetism Group Munich, Germany

Ludwig Maximilian University of Munich March 2025 - July 2025

Committee member and examiner of Bachelor's students course "Research Training" Munich, Germany

Ludwig Maximilian University of Munich Jan. 2025

Committee member and reviewer of doctoral thesis of Mr. Kishan Aherwar Bratislava, Slovakia Faculty of Natural Sciences, Comenius University Aug.2024

Assisting Prof. Dr. Gilder during a geological field trip for Bachelor's students Adnit, Austria

Ludwig Maximilian University of Munich, Magnetism Group June 2024

Herbschule "System Erde", GFZ Potsdam, Germany Public Lecture for School Teachers on the Subject of Geomagnetism

Theoretical and practical course "The basics of reservoir engineering" (100hours, 92 students) Tyumen, Russia

Tyumen State Oil and Gas University 2015, spring semester

SCIENCE OUTREACH

Moderated audience engagement and Q&A Potsdam, Germany

Lange Nacht der Wissenschaften(Night of Science)

Movie "Magnetic Mosaic" Potsdam, Germany

Unesco Earth Futures Festival 2022

https://www.earthfuturesfestival.com/the-films/v/magnetic-mosaic

PUBLICATIONS

Monograph:

1. Savranskaia, T., (2020). "Records of paleomagnetic field intensity in sediments: Crossover approach between relative paleointensity and cosmogenic ¹⁰Be"(Doctoral dissertation, Université de Paris, Paris, France).

Further publications:

b) Publications with peer review process:

- 1. Valet, J. P., Savranskaia, T., Egli, R., Simon, Q., Bassinot, F., Thouveny, N. Geomagnetic moment variation over the last 4.4 Million years through high resolution paleointensity and 10Be production records along ocean sediment sequences. Submitted to **Quaternary Science Reviews**
- 2. Savranskaia, T., Egli, R., Simon, Q., Valet, J. P., Bassinot, F., Thouveny, N. (2024). Removing climatic overprints in sedimentary cosmogenic beryllium records: Potentials and limits. Geochemistry, Geophysics, Geosystems. https://doi.org/10.1029/2024GC011761

- 3. Valet, J. P., Savranskaia, T., Egli, R., Simon, Q., Bassinot, F., Thouveny, N. (2024). Beryllium ten production and relative paleointensity for the past 1.2 million years. Quaternary Science Reviews, 344, 108993. https://doi.org/10.1016/j.quascirev.2024.108993
- 4. **Savranskaia**, **T.**, Egli, R., Valet, J. P. (2022) Multiscale Brazil nut effects in bioturbated sediment. Scientific reports, 12(1), 1-9. https://doi.org/10.1038/s41598-022-14276-w
- 5. **Savranskaia, T.,** Egli, R., Valet, J.-P., Meynadier, L., Bassinot F., Simon, Q., Bourlés, D., Thouveny, N. (2021) Disentangling magnetic and environmental signatures of sedimentary ¹⁰Be/⁹Be records. Quaternary Science Reviews, *257:106809*. https://doi.org/10.1016/j.quascirev.2021.106809
- 6. Valet, J.-P., Thevarasan, A., Bassinot, F., **Savranskaia, T.**, Haddam, N. (2020): Two records of relative paleointensity for the past 4 Myr. Frontiers in Earth Science 8, 148. https://doi.org/10.3389/feart.2020.00148
- 7. Valet, J.-P., Bassinot, F., Simon, Q., **Savranskaia, T.**, Thouveny, N., Bourlés, N., Villedieu, A. (2019): Constraining the age of the last geomagnetic reversal from geochemical and magnetic analyses of Atlantic, Indian, and Pacific Ocean sediments. Earth and Planetary Science Letters 506, 323-331. https://doi.org/10.1016/j.epsl.2018.11.012
- 8. Simon, Q., Thouveny, N., Bourlés, D., Bassinot, F., **Savranskaia, T.** (2018): Increased production of cosmogenic ¹⁰Be recorded in oceanic sediment sequences: Information on the age, duration, and amplitude of the geomagnetic dipole moment minimum over the MatuyamaâBrunhes transition. Earth and Planetary Science Letters, Elsevier, 489, pp.191-202. https://doi.org/10.1016/j.epsl.2018.02.036

c) Publications without peer review process (Conference papers):

- 1. **Savranskaia, T.**, Egli, R., Korte, M., and Panovska, S.: Understanding Geomagnetic Dipole Behaviour and Climatic Fluctuations over the Past 380,000 Years Using Cosmogenic 10Be and Paleointensity Records, EGU General Assembly 2025, Vienna, Austria, 27 Apr-2 May 2025, EGU25-4216, https://doi.org/10.5194/egusphere-egu25-4216, 2025.
- 2. Egli, R., **Savranskaia, T.**, Valet, J.-P.: Field recording mechanism in bioturbated sediments: new insights from 10Be, relative pale-ointensity, and microtektites, EGU General Assembly 2025, Vienna, Austria, 27 Apr-2 May 2025, EGU25-17222, https://doi.org/10.5194/eguegu25-17222, 2025.
- 3. Egli, R., **Savranskaia, T.**, Valet, J.-P, Bassinot, F., Meynadier, L., Simon, Q., Bourlés, D., Thouveny, N. (2020): Dipole strength during the Matuyama-Brunhes reversal reconstructed from the deconvolution of magnetic and climatic modulation of ¹⁰Be/⁹Be records. In EGU General Assembly Conference Abstracts, p. 19562.
- 4. **Savranskaia, T.,** Egli, R., and Valet, J.-P. (2019): Unveiling sedimentary response of cosmogenic Beryllium-10 during the last geomagnetic reversal. AGUFM 2019: GP31B-0720.
- 5. **Savranskaia, T.**, Valet, J.-P, Egli, R., Meynadier, L. (2019): Variations of cosmogenique beryllium -10 concentration during the last geomagnetic reversal Matuyama-Brunhes ". In: The proceedings of the XXV Russian school conference on the questions of paleomagnetism and rock magnetism pp.198-203. Moscow Borok 25-29 septembre, 2019. ISBN 978-5-6043198-9-5.
- 6. **Savranskaia, T.**, Valet, J.-P, Meynadier, L., Bassinot, F., Simon, Q., Bourlés, D., Thouveny, N. (2018): Comparison the relative pale-ointensity and cosmogenic isotope beryllium-10 during the last geomagnetic reversal. In: The proceedings of the XII International school conference "Problems of Geocosmos" pp.215-222. Saint Petersburg 8-11 October, 2018. ". ISBN 978-5-9651-1207-4
- 7. **Savranskaia, T.**, Valet, J.-P, Bassinot, F., Meynadier, L., Simon, Q., Bourlés, D., Thouveny, N. (2017): ¹⁰Be and relative paleointensity signals across the last geomagnetic reversal. AGUFM 2017: GP33B-0985.