

# CURRICULUM VITAE

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## EDUCATION

- 01.2021 – **Doctorate in Cosmochemistry**, ETH Zurich, Switzerland, Department  
PRESENT of Earth Sciences (D-ERDW), Institute of Geochemistry and Petrology  
DOCTORAL THESIS: *Tin stable isotope geochemistry and cosmochemistry*  
Main supervisors: Prof. Dr. Maria Schönbächler and Dr. Manuela Fehr
- experimental tin stable isotope geo- and cosmochemistry
  - data processing and analysis, cosmochemical interpretation
  - analysis of probes from the lake of Zurich for pollution detection
  - analysis of meteorites applied to moderately volatile element depletion in rocky bodies in the solar system
- SPECIALISATION: solar system formation and composition, experimental tin stable isotope geochemistry, data processing and analysis
- 09.2016 – **MSc in Geophysics**, ETH Zurich, D-ERDW. Overall grade: 5.58/6  
09.2018 MASTER'S THESIS: *Effects of boundary topography on the flow forced by libration in longitude in a rotating cylinder*  
Main supervisor: Dr. Jérôme A. R. Noir. Grade: 5.5/6  
⇒ <https://polybox.ethz.ch/index.php/s/Ezwe1U7r1nYbcuZ>
- aim: understanding the effect of medium-scale boundary topography on the flow in enclosed planetary fluid layers
  - preliminary study on topographic effects on the flow in a cylinder using a sinusoidal topography
  - experiment setting-up, particle image velocimetry (PIV) data acquisition and processing
- SPECIALISATION: deep planetary interior, applied geophysics  
COURSE TOPICS: planetary physics and chemistry, fluid dynamics, numerical modelling and programming, inverse theory

- 09.2013 – **BSc in Earth Sciences**, ETH Zurich, D-ERDW. Overall grade: 5.37/6
- 09.2016 BACHELOR'S THESIS: *Ground penetrating radar survey over a buried Roman farmhouse estate in Lindau, ZH*  
 Main supervisor: Dr. Cédric Schmelzbach. Grade: 5.25/6  
 ⇒ <https://polybox.ethz.ch/index.php/s/dtLqAUHW0r0fwyF>  
 – aim: mapping a Roman farmhouse estate in Lindau (CH)  
 – execution of a ground penetrating radar (GPR) survey  
 – 3D data processing and interdisciplinary analysis in combination with previous studies (archaeological excavation and earlier GPR survey)  
 SPECIALISATION: geophysics  
 COURSE TOPICS: mathematics, (geo)physics, (geo)chemistry, seismology, data processing, geology, climatology
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## WORK EXPERIENCE

- 11.2018 – **Research assistant in experimental geophysics**
- 11.2020 ETH Zurich, D-ERDW, Institute of Geophysics  
 RESEARCH PROJECT: *Effects of topography on rapidly-rotating flows in a librating cylinder: an experimental study*  
 Project directors: Prof. Dr. Andrew Jackson, Dr. Jérôme A. R. Noir  
 – Master's thesis continuation: experimental study in a rapidly-rotating librating cylinder with and without chessboard-like topography  
 – PIV data acquisition, processing and post-processing using existing and self-developed codes, flow analysis, geophysical interpretation  
 SPECIALISATION: Earth's core and geodynamo, experimental fluid dynamics  
 OTHER DUTIES: teaching and assistantship, team event organisation
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## PRACTICAL EXPERIENCE

- 2018 – 2019 **Organisation of team events**, Anzère, Switzerland  
 Work group ski trips 2018 and 2019 in collaboration with a colleague (transportation, board and lodging, ski passes and activities)
- 03.2017 **Participation in *ETH Unterwegs***, Sion, Switzerland  
 Presentation of the ETH and D-ERDW to high school students: talk and D-ERDW booth running
- 2017 **Organisation of the *erfa*<sup>2</sup>**, ETH Zurich, Switzerland  
 Member of the organisation committee for the meeting between professionals in Earth Sciences and D-ERDW students

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## TEACHING AND ASSISTANTSHIP

- Spring 2021    **Tutor** for the course *Integrierte Erdsysteme I* for D-ERDW undergraduates
- Spring 2019    **TEACHING TOPIC:** inter-personal and other transferable skills and geological awareness beyond the corresponding lecture (scientific writing, presentation skills, referencing and plagiarism, MATLAB, L<sup>A</sup>T<sub>E</sub>X)  
**TEACHING LANGUAGE:** English and German
- Spring 2019    **Assistant** for the geophysical field lab *Geophysikalisches Feldpraktikum* for D-ERDW undergraduates  
**RESPONSIBILITIES:** student instruction and supervision on using a magnetometer, student transportation and oversight  
**TEACHING LANGUAGE:** German
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## CONTINUING EDUCATION

- January 2021    **How to play it safe in a lab – Online Course** (basic lab safety course)  
 ETH Sicherheit, Gesundheit und Umwelt (SGU)
- Fall 2019    **Academic writing course**, grade 5.75/6  
*Writing research papers for publication: Natural science and engineering C1-C2*, Dr. Simon Milligan, UZH/ETH Language Center
- Fall 2018    **Laser protection seminar** (basic course), ETH SGU
- Fall 2013    **Fire Safety Training** (Brandschutzkurs), ETH SGU
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## SELECTED CONFERENCES

- 13-17.05.2019    **LPS 2019**, Milan, Italy  
 European Space Agency's (esa) 2019 Living Planet Symposium  
 Poster: Meister, A., Noir, J. and Jackson, A. (2019).  
*The Effects of Topography on the Flow in a Librating Cylinder.*
- 05-07.05.2019    **GreZuMar 2019**, Lausanne, Switzerland  
 Meeting between research groups from Grenoble, Zurich and Marseille  
 Talk: Meister, A. (2019). *Effects of Bottom Topography on the Flow driven by Libration in Longitude in a Cylinder.*
- 08-13.07.2018    **SEDI 2018**, Edmonton, Canada  
 16<sup>th</sup> Symposium of SEDI (Study of the Earth's Deep Interior, IUGG)  
 Poster: Meister, A., Burmann, F. and Noir, J. (2018).  
*The Effects of Topography on the Flow in a Librating Cylinder.*

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## TECHNICAL SKILLS

### PROGRAMMING LANGUAGES

- MATLAB, Python, fortran90

### SOFTWARES

- L<sup>A</sup>T<sub>E</sub>X, Microsoft-Office, MicroVec, Maple, ProMAX, Mendeley

### COMPETENCES

- planning and execution of experimental research projects (laboratory and field)
- design and construction of parts of experiment devices
- handling of experimental and measurement devices, experimental data acquisition
- data processing and analysis using existing and self-developed bespoke tools
- geophysical interpretation of the results
- academic writing and presenting for both specialised and more general audience
- numerical modelling methods (finite elements, finite differences)
- interdisciplinary scientific collaboration

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## LANGUAGES

French	native language
German	daily language, fluent very good understanding of Swiss-German
English	business language, fluent
Russian	basic knowledge (level A2.2 on the European Language Scale)

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## HOBBYS

- Nightscape and landscape photography
- Climbing

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## REFERENCES

Available upon request.