

SIMONE PUEL

DEPARTMENT OF GEOLOGICAL SCIENCES & INSTITUTE FOR GEOPHYSICS
JACKSON SCHOOL OF GEOSCIENCES ◊ THE UNIVERSITY OF TEXAS AT AUSTIN
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EDUCATION

- University of Texas at Austin, Austin, TX** August 2018 - Present
Ph.D. in GEOLOGICAL SCIENCES *current GPA: 3.95/4.00*
Advisor: Dr. Thorsten W. Becker & Dr. Luc Lavier
- Michigan Technological University, Houghton, MI** August 2015 - April 2017
M.Sc. in GEOLOGY (Double-Degree Program) *GPA: 4.00/4.00 summa cum laude*
Advisor: Dr. Gregory P. Waite
- University of Milano-Bicocca, Milan, Italy** November 2014 - March 2017
M.Sc. in GEOLOGICAL SCIENCES AND TECHNOLOGIES *final grade: 110/110 cum laude*
Advisor: Dr. Alessandro Tibaldi
- University of Milano-Bicocca, Milan, Italy** September 2011 - October 2014
B.Sc. in GEOLOGICAL SCIENCES AND TECHNOLOGIES *final grade: 110/110 cum laude*
Advisor: Dr. Alessandro Cavallo

WORK EXPERIENCE

- **The University of Texas - Institute for Geophysics** September 2018 - Present
Graduate Research Assistant *Austin, TX*
- **The University of Texas at Austin** January 2019 - December 2020
Teaching Assistant *Austin, TX*
GEO 303: Introduction to Geology (Spring 2020, Fall 2020)
GEO 302E: Earth, Wind and Fire (Spring 2019)
- **Sciovia Pradis-ci S.N.C. di Bernardi Loris** December 2017 - March 2018
Ski-lift Head Service *Trento, Italy*
- **Studio di Geologia e Idrogeologia di Frassinella Luigi** April 2017 - December 2017
Engineering Geologist *Trento, Italy*
- **University of Milano-Bicocca** April 2014 - August 2014
Lab Technician of rock samples *Milan, Italy*

FELLOWSHIPS, AWARDS AND SCHOLARSHIPS

- **“Marshall, Jr. Memorial (EPS) Fellowship” Award** 2021
The University of Texas at Austin, Austin, TX \$ 3.500
Endowed Presidential Scholarship (EPS) for Fall 2021 to recognize the achievements of outstanding students in their respective field of study
- **“Ogden Memorial Scholarship” and “JEF Graduate Independent Studies”** 2021
The University of Texas at Austin, Austin, TX \$ 18.000
Fellowship for Independent Studies for Spring 2021

- **EPSSI (Earth, Planetary, and Space Sciences Institute)** 2016
Michigan Technological University, Houghton, MI \$ 1.500
Scholarship for Stromboli volcano fieldwork and BAIO 2016 workshop
- **INVOGE (International Geological Masters in Volcanology and Geotechniques)** 2015
University of Milano-Bicocca, Milan, Italy € 5.240
Scholarship for 1st selected candidate for joint Master degree Program between the University of Milano-Bicocca and the Michigan Technological University
- **“Cassa Rurale Pinetana Fornace e Seregnano” bank scholarship** 2013 - 2016
Cassa Rurale Pinetana Fornace e Seregnano, Trento, Italy € 2.550
Scholarship for merit distinction in High school and University studies
- **“FONDO GIOVANI - Borse di Studio 5b” scholarship** 2011 - 2016
Opera Universitaria di Trento, Trento, Italy € 24.840
Scholarship for talented young students distinguished in High school and University studies

JOURNAL PUBLICATIONS

4. **Puel, S.**, Villa, U., Becker, T. W., Ghattas, O., Liu, D. (20xx). A Mixed, Unified Forward/Inverse Framework for Earthquake Problems: Material Property Estimate and Bayesian Inference. *In preparation*
3. Dorsett, J., H. Johnson, K. M., Becker, T. W., **Puel, S.** (20xx). Early Ridgecrest Postseismic Deformation Reveals Viscoelastic Flow in Weak Uppermost Mantle in Southern California. *In preparation*
2. **Puel, S.**, Khattatov, E., Villa, U., Liu, D., U., Ghattas, O., Becker, T. W. (20xx). A Mixed, Unified Forward/Inverse Framework for Earthquake Problems: Fault Implementation and Coseismic Slip Estimate. *Submitted to Geophysical Journal International. EarthArXiv preprint: <https://doi.org/10.31223/X5262V>*
1. Ichimura, T., Fujita, K., Yamaguchi, T., Naruse, A., Wells J. C., Zimmer C. J., Tjerk, P. S., Hori, T., **Puel, S.**, Becker, T. W., Hori, M., Ueda, N. (2019). 416-PFLOPS Fast Scalable Implicit Solver on Low-Ordered Unstructured Finite Elements Accelerated by 1.10-ExaFLOPS Kernel with Reformulated AI-Like Algorithm: For Equation-Based Earthquake Modeling. In *Research Poster for SC19: International Conference for High Performance Computing, Networking, Storage and Analysis*, doi: 10.5281/zenodo.3984156, Denver CO, 2019.

CONFERENCE PUBLICATIONS

5. **Puel, S.**, Becker, T. W., Villa, U., Ghattas, O., Liu, D., Khattatov, E. (2021, 08) Forward-Inverse Modeling of Earthquake Cycle Deformation. Poster Presentation at *2021 SCEC Annual Meeting* (poster #025)
4. Johnson, K. M., Dorsett, J. H., **Puel, S.**, Becker, T. W. (2020, 09) Using Postseismic Relaxation Test Southern California Viscosity Models. Poster Presentation at *2020 SCEC Annual Meeting* (poster #114)
3. Dorsett, J. H., Johnson, K. M., **Puel, S.**, Becker, T. W. (2019). Postseismic Deformation and Stress Evolution Following the 2019 M 7.1 and M 6.4 Ridgecrest Earthquakes. *AGU 2019 Fall Meeting* (poster #S31G-0500)
2. Dorsett, J. H., Johnson, K. M., **Puel, S.**, Becker, T. W. (2019, 08) Postseismic Deformation and Stress Evolution Following the 2019 M 7.1 and M 6.4 Ridgecrest Earthquakes. Poster Presentation at *2019 SCEC Annual Meeting* (poster #236)

1. **Puel, S.**, Lanza, F., Medici, E. F., Waite, G. P. (2016). Spectral Variations in Volcanic Jet Noise: the Example of Stromboli Volcano, Italy. *AGU 2016 Fall Meeting* (poster #S11C-2459)

OUTREACH

- Co-organizer UTIG “Brewinar” marine geophysics journal club
- Student member of AGU (American Geophysical Union)
- 1st selected candidate for INVOGE (International Geological Masters in Volcanology and Geotechniques) Program

TECHNICAL STRENGTHS

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|------------------------------|---|
| Operating System | Windows, Linux, MacOS |
| Programming | Python, MATLAB, Bash |
| Modeling and Analysis | FENICS, Firedrake, PYLITH |
| Software & Tools | MS Office, L ^A T _E X, GMT, ArcGis |

LANGUAGES

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| Italian | Native or bilingual proficiency |
| English | Professional working proficiency. TOEFL iBT: 92 (06/2017) |
| German | Elementary proficiency. A2, GOETHE INSTITUT (07/2006) |