Hugo S. SÁNCHEZ REYES

BIRTH: 4 July 1989

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http://hugosanrocks.github.io/ https://github.com/hugosanrocks



Work Experience

Nov. 2019 - Currently Postdoctoral researcher at Université Grenoble Alpes, ISTerre

MONIFAULT ERC Project: Development and application of novel techniques to analyze and classify seismological data to study the evolution

of the stress field in real active faults.

Oct. 2015 - Oct. 2019 PhD. Student at Université Grenoble Alpes, ISTerre

Thesis: Progressive linear kinematic source inversion method and its

perspectives towards the uncertainty quantification

Mar. 2015 - Jun. 2015 Research Internship at Université Joseph Fourier, ISTerre

Project: ANR S4 Subduction: standard and slow seismology

Feb. 2014 - Jun. 2014 Internship at Université Joseph Fourier, ISTerre

Project: 1D Eikonal equation by a DG Finite Element Method

Oct. 2012 - Aug. 2013 Geophysical Specialist in Exploration at COMESA S. A.

Tasks: Development of didactic software for PSTM seismic data.

Other activities:

Since Jan. 2019 Reviewer for Journal of Geophysical Research and

Geophysical Journal International

EDUCATION AND TRAINNING

Oct. 2019 PhD. in Earth Sciences, Solid Earth

Thesis: Progressive linear kinematic source inversion method and its perspectives towards the uncertainty quantification | Advisors: Prof. J. Virieux and Dr. L. Métivier

Université Grenoble Alpes, France

Feb. 2015 MSc. in Engineering Seismology

Thesis: Eikonal Equation by a DG-FEM | Advisor: Prof. Jean Virieux

Université Joseph Fourier, France | Istituto Universitario di Studi Superiori di Pavia, Italy

Apr. 2013 BSc. in Geophysical Engineering

Thesis: Seismic source modeling of Jalisco earthquake (Mw=8.0), 1995, from the inversion of seismic and static records | Advisor: PhD. Vala HJORLEIFSDOTTIR National Autonomous University of Mexico, UNAM, Mexico | Graduated with honors

Other trainings:

Mar. 2013 Guralp-Ampère Latin American Instrumentation Workshop

Basic use and setup of Guralp and FreeWave instruments

Ampère Instrumentation and Telemetry, Mexico

Jul. 2011 Course of field seismic instrumentation

Use of seismic sensors and digitizers

Institute of Geophysics, National Autonomous University of Mexico, Mexico

SCIENTIFIC PUBLICATIONS

[1] Sánchez-Reyes, H. S., Tago, J., Mtivier, L., Cruz-Atienza, V. M. and Virieux, J., 2018.

An evolutive linear kinematic source inversion. JGR Solid Earth, 123,

DOI: 10.1029/2017JB015388. [Link]

[2] Hjorleifsdottir, V., **Sánchez-Reyes**, H. S., Ruiz Angulo, A., Ramrez-Herrera, M. T.,

Castillo-Aja, R., Singh, S. K. and Ji, C., 2018. Was the October 9^{th} 1995 M_w 8 Jalisco, Mexico

earthquake a near trench event? JGR Solid Earth, DOI: 10.1029/2017JB014899. [Link]

[3] Jara, J., Sánchez-Reyes, H. S., Socquet, A., Cotton, F., Virieux, J., Maksymowicz et al., 2018.

Kinematic Study of Iquique 2014 $M_w 8.1$ earthquake: understanding the segmentation of the seismogenic zone. Earth and Planetary Sciences DOI: 10.1016/j.epsl.2018.09.025. [Link]

Submitted:

[1] Sánchez-Reyes, H. S., Essing, D., Beaucé, E. and Poli, P., 2020.

Detailed study of the initiation process of a $M_w4.4$ normal fault earthquake in the middle

lower crust in the Central Apennines. Gephys. Res. Lett., DOI: XXX-XXX-XXX.

Languages & other skills

French: Fluent B2 | Basic: SeismicUnix, QGIS, C++

ENGLISH: Fluent IELTS 7.0 | Intermediate: Template matching, Python, OpenQuake,

SAC, MPI, HypoDD, SEISAN

RUSSIAN: Basic A2 Advanced: Fortran, OpenMP, MatLab, GMT

SPANISH: Mothertongue | Leadership: 2011-2012 President of UNAM's SEG Student Chapter

Organizer of research reading group: Link: "Earthquke Precursors"

Scholarships-Awards & Conferences

2018	AGU Outstanding Student Presentation Award	2020	EGU General Assembly (online)
2018	Mechanics of Earthquake Faulting Workshop	2018	AGU Fall Meeting (Oral)
2015	CNRS Recrutement étudiant handicapé	2017	IAG-IASPEI Kobe Meeting (Poster)
2013	Erasmus Mundus Scholarship MEEES	2016	AGU Fall Meeting (Poster)
$\boldsymbol{2012}$	ExxonMobil Research Scholarship	2015	UGM Annual Meeting (Oral)
2011	Chevron/SEG Student Leadership Travel Grant	2012	UGM Annual Meeting (Oral)
			Posters and presentations:
			[ResearchGate]

Scientific interests

Inverse problems, Bayesian inference, seismic sources, earthquake initiation process, signal processing and programming.

Mobility

Sept. 2015 - Mars. 2016	6 Months PhD. researcher internship at the National Autonomous
	University of Mexico, Mexico
Sept. 2014 - Mars. 2015	6 Months MSc. program at the Istituto Universitario di Studi Superiori
	di Pavia, Italy

HOBBIES AND OTHER ACTIVITIES

Scientific divulgation, disability awareness podcasting, playing guitar and saxophone, ice skating, languages, literature, writing science-fiction tales.