

Oscar Jarillo Michel

✉ ojarillo@mymail.mines.edu

Education

- Aug 2014–Dec 2018 (expected) **PhD in Geophysics, Minor in Computational and Applied Mathematics**, Colorado School of Mines, Golden, Colorado, USA.
- Aug 2011–May 2014 **MSc in Geophysics**, Colorado School of Mines, Golden, Colorado, USA.
- Aug 2006–Dec 2010 **BS in Geophysical Engineering**, Instituto Politécnico Nacional, Mexico City, Mexico.

Research Experience

- Aug 2011–Present **Research Assistant**, Center for Wave Phenomena, Colorado School of Mines, Golden, Colorado, USA.
Working on modeling, processing, and full-waveform inversion (FWI) of microseismic data in anisotropic media.
- Aug 2006–Dec 2010 **Research undergraduate project**, Division of Earth Sciences, Instituto Politécnico Nacional, Mexico City, Mexico.
Working on coding spectral seismic attributes.

Industrial Experience

- Jan 2011–Aug 2011 **Research project**, Department of Seismology, Instituto Mexicano del Petróleo, Mexico City, Mexico.
Working on application of spectral seismic attributes to onshore seismic data.

Scientific Interests

- Anisotropy
- Imaging
- Inverse problems
- Passive seismic
- Seismic data processing
- Seismic modeling

Computational Skills

- Programing C, MATLAB, MPI, OpenMP, Python
Software Linux, Madagascar, Seismic Unix

Languages (ILR scale)

- Spanish **Native proficiency**
English **Full professional proficiency**
French **Elementary proficiency**

Volunteer Service

- 2015–present Technical reviewer for Geophysics.

Awards

- 2010 2nd place, SEG Latin American Challenge Bowl.

Publications

Jarillo Michel, O., and Tsvankin, I., 2017, Waveform inversion for microseismic velocity analysis and event location in VTI media: *Geophysics*, 82, no. 4, WA95-WA103.

Jarillo Michel, O., and Tsvankin, I., 2015, Estimation of microseismic source parameters by 2D anisotropic waveform inversion: *Journal of Seismic Exploration*, 24, 379-400.

Jarillo Michel, O., and Tsvankin, I., 2014, Gradient calculation for waveform inversion of microseismic data in VTI media: *Journal of Seismic Exploration*, 23, 201-217.

Conference Abstracts

Jarillo Michel, O., and Tsvankin, I., 2017, Iterative microseismic event location and VTI velocity analysis using 3D waveform inversion: *87th Annual International Meeting, SEG*: pp. 279-283.

Jarillo Michel, O., and Tsvankin, I., 2016, Anisotropic waveform inversion for microseismic velocity analysis and event location: *86th Annual International Meeting, SEG*: pp. 296-300.

Jarillo Michel, O., and Tsvankin, I., 2016, Anisotropic waveform inversion for microseismic velocity analysis and event location: *17th International Workshop on Seismic Anisotropy*.

Jarillo Michel, O., and Tsvankin, I., 2015, Waveform inversion for microseismic source parameters: Synthetic and field-data applications: *85th Annual International Meeting, SEG*: pp. 462-466.

Jarillo Michel, O., and Tsvankin, I., 2015, Anisotropic waveform inversion for microseismic source parameters: *77th EAGE Conference and Exhibition*: pp. 4172-4176.

Jarillo Michel, O., and Tsvankin, I., 2014, Estimation of microseismic source parameters by anisotropic waveform inversion: *16th International Workshop on Seismic Anisotropy*.

Jarillo Michel, O., and Tsvankin, I., 2014, Waveform inversion for parameters of microseismic sources in VTI media: *84th Annual International Meeting, SEG*: pp. 1045-1049.

Jarillo Michel, O., and Tsvankin, I., 2014, Simultaneous estimation of source parameters for VTI media using waveform inversion: *1st International Workshop on Microseismic Technology (SEG Workshop)*.

Jarillo Michel, O., and Tsvankin, I., 2013, Gradient computation for full-waveform inversion of microseismic data in VTI media: *83th Annual International Meeting, SEG*: pp. 2238-2242.

References