

Saikiran Tharimena

2020

- S. D. Vance, B. G. Bills, M. P. Panning, C. Cochrane, K. Soderlund, T. Nordheim, J. M. Brown, B. Journaux, Marshall Styczinski, C. Paty, S. Tharimena, M. Melwani Daswani, M. Neveu, K. Chin. Coupling Geochemistry to Magnetic Induction, Gravity, and Seismology in Icy Ocean Worlds (*JpGU 2020*)
- B. Knapmeyer-Endrun, F. Bissig, N. Compaire, R. Joshi, R. Garcia, A. Khan, D. Kim, V. Lekic, L. Margerine, M. Panning, M. Schimmel, N. Schmerr, E. Stutzmann, B. Tauzin, **S. Tharimena**, E. Bozdog, D. Peter, A.-C. Plesa, P. Lognonné, S. Smrekar, W. B. Banerdt. Seismic Constraints on the Crustal Structure of Mars from InSight Receiver Functions (*LPSC 2020*)
- S. D. Vance, B. G. Bills, C. Cochrane, M. Melwani Daswani, M. P. Panning, K. Soderlund, S. Stähler, **S. Tharimena**. Geophysical Investigations of Titan's Habitability (*Titan Through Time Workshop, Boulder, Colorado, 2020*)

2019

- **Tharimena S.**, Panning M.P., Staehler S., Vance S., Boehm C., van Driel M. Estimating ice shell thickness of icy moons from flexural and cary waves using 3D seismic simulations (AGU 2019)
- **Tharimena S.**, Rychert C.A., Harmon N. Resolving global discontinuity structure from crust to the mantle transition zone using SS precursors (AGU 2019)
- Rychert C.A., Harmon N., Constable S., Kendall J.M., **Tharimena S.**, Wang S., Agius M., Bogiatzis P., Schlaphorst D., Hicks S.P., A global view on mantle melt dynamics from the lithosphere-asthenosphere boundary to the transition zone, insights from the PI-LAB experiment (AGU 2019)
- Lognonne P, et al. SEIS first year: nm/s² (and less) broadband seismology on Mars and first steps in Mars-Earth-Moon comparative seismology (AGU 2019)
- Rychert C.A., Harmon N., Constable S., Kendall J.M., **Tharimena S.**, Wang S., Agius M., Bogiatzis P., Schlaphorst D., Hicks S.P., A dynamic lithosphere-asthenosphere boundary dictated by variations in melt generation and migration: Results from the PI-LAB experiment in the equatorial mid-Atlantic (AGU 2019)
- Drilleau et al. The Mars Structure Service for InSight: Single station marsquake inversions for structure (AGU 2019)
- Kendall J.M, Harmon N., Rychert C.A., Schlaphorst D., Agius M., **Tharimena S.**, Bogiatzis P. The anisotropic seismic signature of plate formation at a slow spreading center (AGU 2019)
- Panning M.P., Banerdt W.B., Lognonne P. et al. Extraterrestrial Seismology: The perspective after nearly 1 year of InSight on Mars (SAGE/GAGE 2019)
- **Tharimena S.**, Panning M.P., Staehler S., Vance S., Boehm C., van Driel M. Insights into the seismic structure of icy moons from full waveform modeling (LPSC 2019)
- Vance S.D, et al. Enceladus Distributed Geophysical Exploration (AbSciCon 2019)
- Vance S.D, et al. Enceladus Distributed Geophysical Exploration (LPSC 2019)

2018

- **Tharimena S.**, Panning M.P., Vance S.D., Stähler S.C., Boehm C., van Driel M., Vega K.I., Probing the interior of Icy Ocean Worlds – Full waveform modelling of Enceladus and Titan – AGU Fall Meeting 2018
- Panning M.P., **Tharimena S.**, Schmidt B., Stähler S.C., Vance S.D., Hurford T., Schmerr N., Kedar S., Where are things shaking? A seismological perspective for potential landing sites on Europa – AGU Fall Meeting 2018
- Vega K.I., Vance S.D., **Tharimena S.**, Daswani M.M., Panning M.P., Sotin C., Brown J.M., Tobie G., Interior structures of Enceladus and Titan with respect to oceanic equations of state – AGU Fall Meeting 2018
- Rychert C.A., Harmon N., Kendall J.M., **Tharimena S.**, Agius M., Imaging the crust and mantle beneath the equatorial Mid-Atlantic Ridge using the PI-LAB experiment – AGU Fall Meeting 2018
- Kendall J.M., Rychert C.A., Harmon N., Hicks S.P., **Tharimena S.**, Abercombie R., Bogiatzis P., Schlaphorst D., The anatomy of an ocean transform fault rupture: the 2016 M7.1 Romanche earthquake in the Mid-Atlantic from

high-resolution local seismic and bathymetry data recorded with the PI-LAB experiment – AGU Fall Meeting 2018

- Schlaphorst D., Hicks S.P., Rychert C.A., Harmon N., Kendall J.M., Bogiatzis P., Abercombie R., **Tharimena S.**, Agius M., A local seismicity catalogue for the Mid-Atlantic: New views on earthquake processes along oceanic transform faults and ridge segments: earthquake distribution and rupture processes along the Chain Fracture Zone in the Mid-Atlantic from a dense OBS network – AGU Fall Meeting 2018
- Harmon N., Rychert C.A., Agius M., **Tharimena S.**, Kendall J.M., Bogiatzis P., Surface wave imaging of the oceanic lithosphere in the equatorial Atlantic from the PILAB experiment – 36th General Assembly of the European Seismological Commission 2018
- Agius M., Harmon N., Rychert C.A., **Tharimena S.**, Kendall J.M., Sediment characterization at the equatorial Mid-Atlantic Ridge from P-to-S seismic phase conversions recorded on the PI-LAB experiment – 36th General Assembly of the European Seismological Commission 2018
- Rychert C.A., Harmon N., **Tharimena S.**, Agius M., Kendall J.M., S-to-P receiver function imaging of the 0 – 40 My old Atlantic plate from the PI-LAB experiment – 36th General Assembly of the European Seismological Commission 2018
- Agius M., Hicks S.P., Bohon W., Denton P., Eakin C., Gil A., Gualtieri L., Mora C., Van Noten K., Schaeffer A., **Tharimena S.**, Parolai S., Sarkar R., Setting up an International Day for Seismology – 36th General Assembly of the European Seismological Commission 2018
- Rychert C.A., Harmon N., **Tharimena S.**, Kendall J.M., S-to-P receiver function imaging of the 0 – 40 My old Atlantic plate from the PI-LAB experiment – EGU General Assembly 2018
- Harmon N., Rychert C.A., Agius M., **Tharimena S.**, Kendall J.M., Surface wave imaging of the lithosphere asthenosphere system beneath 0-80 My seafloor of the equatorial Mid-Atlantic Ridge from the PI-LAB experiment – EGU General Assembly 2018
- Agius M., Hicks S.P., Bohon W., Denton P., Eakin C., Gil A., Gualtieri L., Stock C.M., Van Noten K., Schaeffer A., **Tharimena S.**, Parolai S., Sarkar R., An International Day for Seismology: rational, co-ordination, and planning – EGU General Assembly 2018

2017

- **Tharimena S.**, Rychert C.A., Harmon N., Kendall J.M., S-to-P receiver function imaging of young oceanic lithosphere at the mid-Atlantic Ridge (in preparation) – AGU Fall Meeting 2017
- **Tharimena S.**, Rychert C.A., Harmon N., White P., A systematic search for the base of the Pacific lithosphere – AGU Fall Meeting 2017 (Invited)
- Rychert C.A., Harmon N., Agius M., **Tharimena S.**, Surface wave imaging of the lithosphere-asthenosphere system beneath 0-80 My seafloor of the equatorial mid-Atlantic ridge from the PI-LAB experiment – AGU Fall Meeting 2017
- Kendall J.M., Rychert C.A., Harmon N., **Tharimena S.**, Agius M., Anisotropy of the upper mantle beneath the equatorial part of the mid-Atlantic ridge – AGU Fall Meeting 2017
- Harmon N., Rychert C.A., Agius M., **Tharimena S.**, Kendall J.M., Marine geophysical characterization of the Chain Fracture Zone in the equatorial Atlantic – AGU Fall Meeting 2017
- Hicks S.P., Harmon N., Rychert C.A., **Tharimena S.**, Bogiatzis P., Savage B., Shen Y., Baillard C., Investigating subduction reversal in Papua New Guinea from automatic analysis of seismicity recorded on a temporary local network – AGU Fall Meeting 2017

2016 – 2013

- **Tharimena S.**, Rychert C.A., Harmon N., Imaging the continental lithosphere discontinuity structure – search for the elusive cratonic LAB – AGU Fall Meeting 2016
- Rychert C.A., **Tharimena S.**, Harmon N., SS precursor imaging of upper mantle discontinuity structure beneath the Pacific – 17th International SEISMIX Symposium 2016
- Rychert C.A., Harmon N., **Tharimena S.**, Imaging lithospheric seismic discontinuities beneath Cascadia using S-to-P receiver functions – AGU Fall Meeting 2016

- **Tharimena S.**, Rychert C.A., Harmon N., Global seismic imaging of the lithosphere asthenosphere boundary – AGU Fall Meeting 2015
- **Tharimena S.**, Rychert C.A., Harmon N., Seismic imaging of a mid-lithospheric discontinuity beneath Ontong Java Plateau – New Advances in Geophysics 2015
- **Tharimena S.**, Rychert C.A., Harmon N., Radially anisotropic viscous root beneath Ontong Java Plateau: Evidence from SS waveform modelling – EGU General Assembly 2014
- **Tharimena S.**, Rychert C.A., Harmon N., Resolving structure of the Ontong Java Plateau – AGU Fall Meeting 2013
- **Tharimena S.**, Rychert C.A., Harmon N., Seismic Investigation of the Ontong Java Plateau – Structure and Dynamic of the Lithosphere/Asthenosphere System (workshop), IGP 2013
- **Tharimena S.**, Rychert C.A., Harmon N., Seismic imaging of Ontong-Java Plateau using SS precursors – British Geophysical Association Postgraduate Research in Progress 2013

Invited Talks

- Seismic imaging of a dynamic plate beneath the Pacific and the equatorial mid-Atlantic ocean (UCLA, 2019)
- Seismology on icy ocean worlds: Full waveform modeling of Enceladus (NASA JPL – ICE, 2019)
- Modeling 3D seismic wavefield on Titan and icy moons (NASA Astrobiological Institute: Titan, 2019)
- A global perspective of the lithosphere-asthenosphere system: from continents to oceans (IISER Pune, 2019)
- Seismic investigations of icy ocean worlds (CSIR-National Geophysical Research Institute, 2019)
- From continents to oceans – the evolution of the lithosphere-asthenosphere system (CSIR-National Geophysical Research Institute, 2018)
- A systematic search for the base of the Pacific lithosphere (AGU, 2017)
- Environmental sustainability and sustainable development (EcoSchools, National Oceanography Centre, 2014, 2015)
- Seismic imaging of a mid-lithospheric discontinuity beneath Ontong Java Plateau (British Geophysical Association New Advances in Geophysics, LAB, 2015)
- Introduction to global seismology: An engineer's perspective (Visvesvaraya National Institute of Technology, Nagpur, 2015)

Press Coverage

- How thick is a continent? Seismic waves and diamonds hold clues (Cosmos Magazine, <https://cosmosmagazine.com/geoscience/how-thick-is-a-continent-seismic-waves-and-diamonds-hold-clues>)
- An improved thickness estimate for Earth's continents (Phys Org, <https://phys.org/news/2017-08-thickness-earth-continents.html>)
- A thorny debate in plate tectonics may finally be resolved (The Atlantic, <https://www.theatlantic.com/science/archive/2017/08/how-deep-is-a-continental-plate/537393/>)