



Geophysical Society of Pittsburgh



*Proudly Presents Wednesday, April 6, 2022
At Cefalo's Restaurant, Carnegie, PA and via Zoom.*

Illuminating Fine Scale Geology and Creating Robust Seismic Attributes Using High Trace Density Seismic Data in the Midland Basin

This talk will be presented in-person by:

Mr. Andrew Lewis,
Fairfield Geotechnologies

Benefits of a new high trace density (HTD) seismic survey in the Midland Basin are illustrated by comparing a 2019 HTD 3D seismic survey to a 2009 vintage 3D seismic survey. HTD seismic acquisition improves the spatial resolution of the seismic image and associated seismic attributes. This enables the interpretation of structural and stratigraphic geologic frameworks that are less resolved using onshore acquisition methods typical for the late-2000s. The 2019 HTD survey geometry collects additional data in various domains that the 2009 vintage survey does not. These additional data include the acquisition of more near and far offset traces, finer lateral sampling, higher fold, broader frequencies, and fuller azimuthal sampling. The increase in resolution from the 2019 HTD seismic survey illuminates fine-scale geology that is less resolved in the 2009 seismic data.

Comparisons of seismic images are made in the Grayburg formation, and at the toe of a mass transport deposit (MTD) in the Upper Leonard formation to illustrate the benefits of HTD seismic surveys for imaging and interpreting complex geology. The increased resolution from the 2019 HTD seismic survey also benefits the generation of robust seismic attributes, which can be further used to characterize fine-scale geology.

*Please RSVP using the registration link on the Geophysical Society of Pittsburgh website at: www.thegsp.org
Cost: \$35 Members, \$40 Non-members (\$20 for Students). Meeting Location: 428 Washington Ave, Carnegie, PA 15106
(412) 276-6600.*



Biography: **Andrew Lewis** – Technology Manager, Fairfield Geotechnologies

Andrew has 14 years of experience as an energy industry professional. He joined Fairfield Geotechnologies in 2016. Most of his career has focused on onshore seismic data processing and reservoir characterization. In his current role as Technology Manager, Andrew leads technology assessment and workflow implementation to realize and enhance the value of modern 3D seismic data in various basins across the U.S. He has created technical partnerships and working relationships with various companies that have synergistic data, software, and analytical capabilities. He specializes in Permian Basin seismic acquisition, processing and imaging, and reservoir characterization in both the Delaware and Midland Basins. He is also involved in understanding the role that 3D seismic data plays in CCS and induced seismicity applications. He is passionate about bridging the gap between geology, geophysics, and engineering disciplines. Ultimately, Andrew works to drive customer efficiencies and profitability through data and technology. Andrew graduated with an M.Sc. in Geophysics from the University of Houston in 2012. He also graduated with an Executive MBA from Texas A&M's Mays School of Business, Class of 2020.

Wednesday April 6th, 2022

Agenda:

11:15 Door Open/Social Half Hour

11:45 pm Lunch Buffet

12:00 pm Lecture

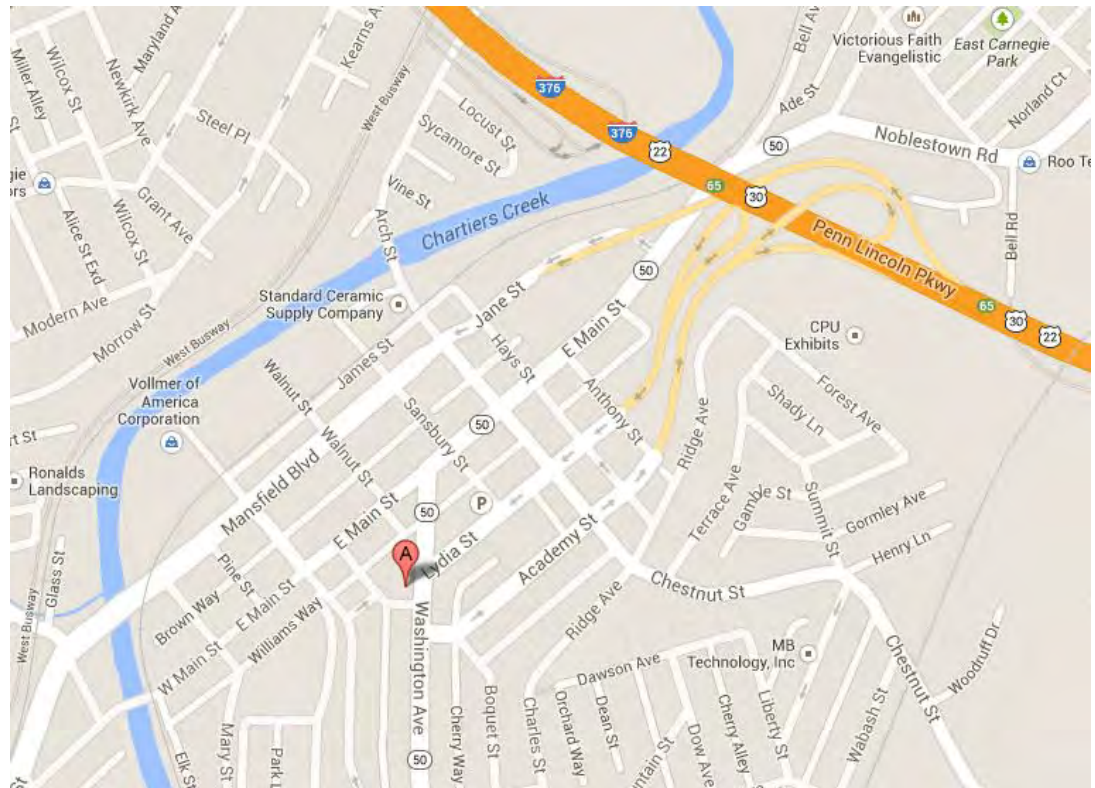
This presentation will also be available via a remote ZOOM link.

To receive a CEU certificate from this lecture please contact *Bill Harbert*

This months lecture will be held at :

Cefalo's

**Banquet & Event Center
428 Washington Ave.
Carnegie, PA 15106
412.276.6600**



We would like to thank our 2021-2022 Corporate Sponsors. Please contact Joel Starr if you are interested in sponsoring the GSP

GOLD



SILVER



BRONZE



3rd Annual
Appalachian Basin
Geophysical Symposium

Wednesday, June 15th, 2022
Hilton Garden Inn Pittsburgh/Southpointe



Sharing geophysical knowledge to maximize unconventional resource development of the Appalachian Basin

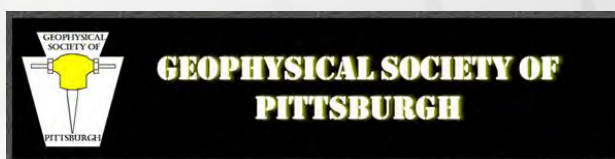
*Now accepting abstracts and talks emailed to:
harbert@pitt.edu*

Abstract submission deadline – 4/18/22

Early Bird Registration, Sponsorship and Exhibits will be accepted at <http://thegsp.org/>

June 16th, 2022: GSP Golf Tournament at the Quicksilver Golf Club, Washington County, Pennsylvania

This will be an in-person symposium. We look forward to seeing all of you in Pittsburgh.



<http://thegsp.org/>



Sponsorship Opportunities



The Geophysical Society of Pittsburgh offers sponsorship opportunities. Our monthly meetings occur each first Tuesday of every month beginning in September through May.

Since our inception in 2010, meetings have been very well attended by industry professionals, averaging well over 50 attendees per meeting, peaking at more than 100 for our most highly attended meeting. Not only do our meetings offer exceptional technical presentations in the field of geophysics, but they provide an outstanding networking opportunity for oil and gas industry professionals working in the Appalachian basin.

Your generous donations will help in the following ways: 1) helping to bring in distinguished lecturers; 2) offsetting part of the cost of the monthly meeting venue; and 3) enabling a Scholarship Program for future Geophysicists to be awarded each year to an outstanding student enrolled in a Geophysics program at one of our local universities.

Your company logo will be boldly displayed during the social hour of each meeting on the front screen, as well as on all meeting announcements and on our website. We are offering corporate sponsorship opportunities at several levels this year, as well as opportunities to sponsor our social hour during the meeting. Please note that a secure payment link is now available on our website for your added enrollment convenience.

Please click [HERE](#) to download more information, then return to this page to enroll as a sponsor.



Geophysical Society of Pittsburgh

The Geophysical Society of Pittsburgh successfully hosted the first and second Appalachian Basin Geophysical Symposia (ABGS). The events were huge successes with great speakers covering the latest innovations in geophysical research, technology and perspectives of the Appalachian Basin. We thank all our generous sponsors, speakers and organizers who made this event possible.

The positive feedback received from our community has prompted the GSP board to make the ABGS an annual event. With the addition of this yearly symposium, *it was determined that the monthly meetings should be reduced to a quarterly basis.*

The goals of this change are twofold:

1. Boost attendance numbers at our general meetings;
2. Focus Appalachian Basin centric talks for the ABGS.

Two of the quarterly meetings will occur in the fall and the other two during the spring. The ABGS will still be held around the beginning of June in tandem with the golf outing. This ensures that our members still have the opportunity to network on a semiregular basis.

We hope these changes help enhance the GSP's ability to promote the science of geophysics as well as promote the fellowship and cooperation among its membership. We look forward to seeing everyone at the first meeting this September.

Sincerely,

The GSP Board

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## 2021-2022 GSP OFFICERS

|                        |                |                           |
|------------------------|----------------|---------------------------|
| <i>President:</i>      | Jianli Yang    | Seneca Resources          |
| <i>Vice President:</i> | Brian Lipinski | DiGioia Gray              |
| <i>Treasurer:</i>      | Joel Starr     | Independent<br>Consultant |
| <i>Secretary:</i>      | Bill Harbert   | Univ. of Pittsburgh       |



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Your Dues and Sponsorship in Geophysical Society of Pittsburgh go toward:

- *Outstanding Monthly Lecture Series*
- *SEG Distinguished Lecturers*
- *Annual Scholarship Awards*
- *Annual Golf Outing*
- *Short Courses*

Please contact Jianli Yang, Joel Starr, Brian Lipinski or Bill Harbert for Sponsorship Opportunities.

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