

From: (null)
Subject: FW: links
Date: October 12, 2021 at 9:56 AM
To:

From: Weglein, Arthur B
Sent: Saturday, January 18, 2020 1:53 AM
To: Weglein, Arthur B <aweglein@Central.UH.EDU>
Subject: links

I hope that this note finds you very well. Below please find a video of a **longer/extended version** of an invited key-note address for the **SEG/KOC Workshop: Seismic Multiples, the Challenges and the Way Forward” in Kuwait December 3-5.**

“ A new perspective on removing and using multiples | they have the same exact goal | imaging primaries, recorded and unrecorded primaries | Recent advances in multiple removal”.

https://youtu.be/sD89_418h1A

In the links below, and in the attachments, please find documents and video presentations that support the objectives and strategy presented in the new video in the link above, with background, context and perspective.

I hope that you find this new video, (the extended version of a key note address at the SEG/KOC Workshop in Kuwait)in the link above, to be informative, interesting and worthwhile. As always, we thank you for your encouragement and for your support.

We send you and your family our warmest greetings for the Holiday Season and our very best wishes for [Good Health](#) and Happiness in the New Year,

Arthur

Dr. Arthur Benjamin Weglein

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<http://mosrp.uh.edu/news/key-note-address-at-the-seg-koc-workshop-dec-3-5-2019>

<http://arthurbenjaminweglein.com>

<https://drive.google.com/file/d/13Nv0MDJKDjxPYsQdBQ95stC3Z7Qwcjxs/view?usp=sharing>

The seismic processing chain

Green's theorem: Wavelet estimation, reference wave and reflection data prediction (including on-shore advances and progress)

Green's theorem Source and receiver de-ghosting (including on-shore advances and progress)

Inverse scattering series (ISS) Free surface multiple elimination

ISS Internal multiple attenuation and elimination

ISS Q compensation with knowing, estimating or determining Q

Green's theorem a new and more effective depth imaging with a velocity model

ISS direct depth imaging without a velocity model

ISS non-linear direct parameter estimation, time lapse [application](#) (and comparison with non-linear iterative model matching)

This link provides a development of all the methods and projects within M-OSRP from a single simple starting point.

An executive summary overview of M-OSRP research projects can be found in

<http://mosrp.uh.edu/news/executive-summary-progress-2017>

This link below provides a menu for all the video presentation from the 2018 M-OSRP Annual Technical Review- we point out, and possibly of particular interest for this SEG/KOC Workshop, **are the advances by Dr. Jing Wu in on-shore ground roll and reflection data prediction without damaging either, and for on-shore de-ghosting.**

[M-OSRP Annual Technical Review Presentations: Videos with Synced Slides and Meeting Agenda](#)

A recent development (Weglein, 2020) provides a new concept, set of methods and Green's theorem and ISS algorithms **That remove the need to know, estimate , or to determine, both subsurface and near-surface information , that is- no information beneath and at the Earth's surface (or at and beneath the ocean bottom for OBS) for all preprocessing and processing objectives.** The current inability to determine adequate near surface properties represents a major obstacle for on-shore and OBS seismic E&P effectiveness. We have a new set of algorithms within our pipeline of capability and

effectiveness. We have a new set of algorithms within our pipeline of capability and delivery that directly addresses that problem, by developing a suite of new effective methods that do not require, or have any interest in knowing any subsurface and near surface (and at the Earth's surface) information.

Game-changing migration

Petrobras invited us to present at a game changing seminar series- thought that might be of interest

[M-OSRP Invited Presentation at the Petrobras Workshop on Game Changing Seismic Technology](#)

<http://mosrp.uh.edu/news/invited-presentation-petrobras-workshop-aug-2016>

Recent advances in the physics of imaging and game- changing Q compensation without knowing, estimating or determining Q (for improved [resolution](#), amplitude analysis and illumination) assuring increased low and high frequency benefit for petroleum exploration

<http://www.uh.edu/nsm/physics/news-events/stories/2018/0525-seismic-processing.php>

On direct inversion for FWI objectives

[Key-note address, Abu Dhabi, March 31st, 2015 presented at the SEG FWI, Workshop Filling the gaps in Abu-Dhabi](#)

M-OSRP delivery, impact and recognition

<http://mosrp.uh.edu/news/key-note-address-at-the-seg-koc-workshop-dec-3-5-2019>

News and update from M-OSRP: June, 2019. https://m.facebook.com/story.php?story_fbid=2350596735209811&id=100007785225589

<http://mosrp.uh.edu/news/papers-and-presentations-documenting-m-osrp-goals-focus-plans-delivery-and-impact>

<http://mosrp.uh.edu/news/m-osrp-strategy-and-plan-for-continued-high-impact-seismic-development-and-delivery-11-27-18>

[Arthur Weglein selected as Co-Editor-in-Chief of the Journal of Seismic Exploration](#)

<http://nsm.uh.edu/news-events/stories/2016/1024-weglein-award.php>

<http://mosrp.uh.edu/news/awards-recognition-201612>

[2018 Ecopetrol invited-paper-on-seismic-migration-and-inversion—abweglein-v2.pdf](#)

[2019 SEG KOC Workshop Challenges and a Way Forward v4.pdf](#)

[2019 SEG-KOC-Workshop-Weglein-ABSTRACT.pdf](#)

[ADNOC Talk2_May1st_v2.pdf](#)

[Kristin ISS Field Data Depth Imaging JSE SEISMIC_No21-1.pdf](#)

[Linear meaning Weglein et al 2009.pdf](#)

[multi-D_IME_v6_with_highlighting_, SEG19.pdf](#)

[ZOU Weglein ISS Q comp without Q -10-23-002.pdf](#)

[int-2016-0198.1-1,invited paper SEG Interpretation Journal on Amplitude analysis and interpretation.pdf](#)

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SEG/KOC Workshop: Seismic Multiples, the Challenges and the Way Forward” in Kuwait December 3-5 2019 .

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[development-and-delivery-11-27-16](#)

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