SEG Honorary Lecturer Tour
【東京開催】のご案内

2019 年 4 月 22 日
物理探査学会

Society of Exploration Geophysicists (SEG、米国物理探査学会)では、著名な講師が世界中を廻って講演を行う教育ツアーを実施しています。2019 年の Honorary Lecturer Tour では、地震探査データの振幅解釈に重要な地震波の減衰や分散についてのお話を聞くことができます。
この度、物理探査学会では、Boris Gurevich 講師を招聘して本講演会を東京でも開催することとなりました。是非ともこの機会をお見逃しなく、ご参加いただけますようご案内申し上げます。

SEG 2019
Honorary Lecturer
- Pacific South -
Boris Gurevich

記

講演会名：SEG Honorary Lecture Program -Pacific South-
講　　師：Boris Gurevich (Curtin University)
演　　題：Seismic attenuation, dispersion and anisotropy in porous rocks: Mechanisms and Models

【東京開催】

日　時：　**2019 年 5 月 23 日（木）　16:00～17:30　（懇親会 17:30～）**
会　場：　国際石油開発帝石株式会社　3403 階会議室
赤坂 Biz タワー　(東京都港区赤坂五丁目 3 番 1 号)
東京メトロ千代田線「赤坂」駅 1 出口（出口から直結しています）
※赤坂 Biz タワー34 階に直接お越しください。
参加費：　講義　**無料**　　懇親会　**3000 円程度**
参加申込締切：2019 年 5 月 16 日（木）
参加申込方法：物理探査学会ホームページからお申し込みください。

- ◆ 物理探査学会会員の方は、会員ページ(こちら)より会員認証の後、会員サービス→オンライン参加登録システムにお進みください。
- ◆ 非会員の方は、こちら(一般)またはこちら(学生)からお申し込みください。
- ◆ 懇親会への参加／不参加も併せてお知らせください。会費は現地で集めさせていただきます（事前の入金は不要です）。

備　考：　赤坂 Biz タワーへの入館には事前登録が必要です。必ず参加申込をお願いします。

お問合せ先：公益社団法人物理探査学会　事務局
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以上

SOCIETY OF EXPLORATION GEOPHYSICISTS

2019 Pacific South Honorary Lecturer

Seismic attenuation, dispersion and anisotropy in porous rocks: Mechanisms and Models

by Boris Gurevich
Curtin University and CSIRO
Perth, Australia

Understanding and modeling of attenuation of elastic waves in fluid-saturated rocks is important for a range of geophysical technologies that utilize seismic, acoustic, or ultrasonic amplitudes. A major cause of elastic wave attenuation is viscous dissipation due to the flow of the pore fluid induced by the passing wave. Wave-induced fluid flow occurs as a passing wave creates local pressure gradients within the fluid phase and the resulting fluid flow is accompanied with internal friction until the pore pressure is equilibrated. The fluid flow can take place on various length scales: for example, from compliant fractures into the equant pores (so-called squirt flow), or between mesoscopic heterogeneities like fluid patches in partially saturated rocks. A common feature of these mechanisms is heterogeneity of the pore space, such as fractures, compliant grain contacts, or fluid patches. Using theoretical calculations and experimental data, we will explore how this heterogeneity affects attenuation, dispersion, and anisotropy of porous rocks. I will outline a consistent theoretical approach that quantifies these phenomena and discuss rigorous bounds for attenuation and dispersion.

Biography

Boris Gurevich has an MSc in geophysics from Moscow State University (1976) and a PhD from Institute of Geosystems, Moscow, Russia (1988), where he began his research career (1981–1994). In 1995–2000 he was a research scientist at the Geophysical Institute of Israel, where he focused mainly on diffraction imaging problems. Since 2001, he has been a professor of geophysics at Curtin University and advisor to CSIRO (Perth, Western Australia). At Curtin he has served as Head of Department of Exploration Geophysics (2010–2015) and since 2004 as director of the Curtin Reservoir Geophysics Consortium. He has served on editorial boards of Geophysics, Journal of Seismic Exploration, and Wave Motion. He is a Fellow of the Institute of Physics and has more than 100 journal publications in the areas of rock physics, poroelasticity, seismic theory, modeling, imaging, and monitoring of CO_2 geosequestration. His research achievements include development of advanced theoretical models of seismic attenuation and dispersion in heterogeneous porous rocks.

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