

Search & Browse

- Simple Search
- Advanced Search
- Browse by Subject
- Browse by Year
- Browse by Conferences/Volumes
- Latest Additions

Information


- Home
- About the Archive
- Archive Policy
- History
- Help
- FAQ
- Journal Eprint Policies
- Register
- Contact Us

News

Guide to new PhilSci-Archive features.

Underdetermination in Geophysics

Miyake, Teru (2010) *Underdetermination in Geophysics*. In: [\[2010\] Philosophy of Science Assoc. 22nd Biennial Mtg \(Montréal, QC\) > PSA 2010 Contributed Papers](#).

 PDF - Submitted Version
[Download \(196Kb\)](#) | [Preview](#)

Abstract

This paper examines the epistemological implications of a particular underdetermination problem from geophysics, with an emphasis on understanding how the scientists themselves tried to deal with the problem. The problem is from the highly influential work of the geophysicists Backus and Gilbert in the late 60' s, who were trying to determine the internal structure of the Earth using seismic waves. I find that actual underdetermination problems can be vastly complex, with different sources of underdetermination having different epistemological implications. A better understanding of actual cases of underdetermination is needed before we can make epistemological conclusions based on underdetermination.

Export/Citation: [EndNote](#) | [BibTeX](#) | [Dublin Core](#) | [ASCII \(Chicago style\)](#) | [HTML Citation](#) | [OpenURL](#)
Social Networking: [Share](#) |

Item Type: Conference or Workshop Item (UNSPECIFIED)
Keywords: underdetermination, geophysics, physics
Subjects: [General Issues > Confirmation/Induction](#)
[Specific Sciences > Earth Sciences](#)
[General Issues > History of Science Case Studies](#)
[General Issues > Theory/Observation](#)


Conferences and Volumes: [\[2010\] Philosophy of Science Assoc. 22nd Biennial Mtg \(Montréal, QC\) > PSA 2010 Contributed Papers](#)
Depositing User: [Mr. Teru Miyake](#)
Date Deposited: 09 Nov 2010 08:44
Last Modified: 09 Nov 2010 08:44
Item ID: 8387
URI: <http://philsci-archive.pitt.edu/id/eprint/8387>

Actions (login required)

 [View Item](#)


Document Downloads

ULS D-Scribe



This site is hosted by the [University Library System](#) of the [University of Pittsburgh](#) as part of its [D-Scribe Digital Publishing Program](#)




E-Prints



Philsci Archive is powered by [EPrints 3](#) which is developed by the [School of Electronics and Computer Science](#) at the University of Southampton. [More information and software credits](#).

Share

Feeds

 Atom  RSS 1.0
 RSS 2.0