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Objectives

Abstract:

The exploration of energy resources, in particular geothermal energy, has evolved towards the quantitative evaluation of information produced during reconnaissance and at advanced stages. The introduction of the concepts of geothermal plays and play-fairway have provided the parameters used in the new statistical integration models. Knowledge-based integration models have been displaced by data-driven models using statistical methods and machine learning in the exploration and evaluation process, thus increasing the efficiency of geothermal reservoir discovery.

Short Bio:
Physicist from the Faculty of Sciences of the UNAM and PhD in Physical-Mathematical Sciences at the Academy of Sciences of the USSR. She obtained a Diploma in Geothermal Energy Technology from the University of Auckland in New Zealand. She has been working as a researcher at the Institute of Geophysics of the UNAM for 43 years. Emeritus Researcher of the National System of Researchers. Member of the Mexican Academy of Sciences and the Mexican Academy of Engineering. President of the Engineering Geology Specialty Commission of the Academy of Engineering. Associate Editor of the journal Geothermics and member of the Editorial Board of the journal Natural Resources Research. Her scientific work includes a total of 158 publications, 2 books, 5 chapters in books; three maps of geothermal resources of the Mexican Republic. He has supervised 59 theses. He has been visiting professor at Harvard University (Department of Earth and Planetary Sciences), USA, the University of Auckland (Geothermal Institute and Geology Department), New Zealand and the University of Barcelona, Spain. His projects focus on energy transition research, especially on the development of new methods of geothermal exploration and exploitation, permanent CO_2 capture in geothermal reservoirs, extraction of useful substances (Li) from geothermal fluids and the use of oil wells in the exploitation of geothermal energy.

Speakers

Speaker: Dr. Rosa María Prol-Ledesma, Senior Researcher at the Institute of Geophysics, National Autonomous University of Mexico (UNAM).
Host: Octavio Castillo Reyes, Research Associate at Wave Phenomena Group, CASE, BSC, and Professor in the Department of Computer Architecture, UPC.
Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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