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GULF COAST ACADEMIC SUPERCOMPUTING

SEISMIC DATA ALGORITHM DEVELOPMENT IN PHYSICS AT UH

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To improve the likelihood of successful drilling in petroleum exploration efforts, it is critical to obtain adequate and detailed images of the subsurface, which lead to a reliable interpretation. In this talk, we will present the multiple attenuation algorithm for the pre-imaging process developed in the Mission-Oriented Seismic Research Program (M-OSRP). Our 3D seismic data processing algorithm achieves a great advantage in imaging over traditional 2D algorithms, which carry the cost of larger computation and storage requirements.

M-OSRP, a TLC² member center, is a research program and petroleum industry consortium, started in January 2001 at the University of Houston to address seismic exploration and production problems whose solutions would have the most significant positive impact on the ability to locate and produce hydrocarbons.