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## **LITE—A New Paradigm to Integrate Research, Technology Transfer, and Production**

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### **ABSTRACT**

The Louisiana Immersive Technologies Enterprise (LITE) was created in September 2006, as an economic development driver for the state of Louisiana. LITE brings together academic research, technology transfer, and commercial services under a unique combination of visualization, high-performance computing, and advanced networks.

The integration of these technologies enables a wide range of synergistic activities involving teams of faculty, scientist, students, industry practitioners, and government researchers. Together, these teams address applied research problems in many disciplines, developing new visualization and computing models, as well as deploying innovative software technologies and applications. Examples of such projects are the real-time integration of intense supercomputing simulations with immersive visualization to provide researchers a dynamic environment to explore interactively their problem domain, and the ability to display and correlate large amounts of data through the use of multidimensional visualizations.

LITE is a leading institution in the area of the integration of visualization and computational simulations, making its facility available to industry, research, and applied groups from around the nation. LITE's wide range of projects are supported through collaborations with many agencies: Department of Energy, National Science Foundation, Army Research Lab, and Office of Naval Research, as well as private funding through its collaborations and partnerships with industry. LITE leverages the State of Louisiana technical infrastructure by being one the Louisiana Optical Network Initiative (LONI) nodes, and having strong collaborations with most of the other universities in the state.

This presentation will provide a summary of the activities that are happening at LITE, emphasizing work in the oil and gas areas.