

On Tuesday, May 13, Noon - 1:00 p.m., Section 367 will present "Virtual Observatories: How Modern Technology is Reshaping Research in Astronomy" featuring Dr. Joe Jacob of the Exploration Systems Autonomy Section, in the 167 Conference Room.

In recent years the Astronomy community has witnessed an explosion in the size and complexity of datasets that are available for astronomical research due to rapid advances in remote sensing technology. The massive datasets that now exist collectively contain tens of terabytes of imagery and catalog data in wavelengths spanning the entire electromagnetic spectrum. Although this rich data store represents a significant opportunity for new scientific discoveries, it also represents a serious challenge to the community:

"How does one effectively and efficiently extract information from such a large and complex collection of data?"

To address this question, NASA and the National Science Foundation (NSF) are both funding components of the National Virtual Observatory (NVO). In the past few years JPL has supported the NVO community with technology that enables high performance access, processing, and visualization of massive astronomical data sets. Joe provides an overview of some of these key technologies, as well as a summary of some of the key developments emerging from the NVO.