LSU's Center for Computation & Technology & the Office of Strategic Initiatives'

I<sup>3</sup> Project invite all summer programs to attend

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## Presentation by Astrophysicist Dr. Edward Seidel

CCT

Friday, July 13, 2012

3:00 PM — Presentation

4:00 PM — Buffet Dinner

Life Sciences Annex Auditorium (A101)

RSVP by July 6, 2012 www.i3.lsu.edu/summer/seidel

"The Data and Compute-Driven Transformation of Modern Science"



We all know that modern science is undergoing a profound transformation as it aims to tackle the complex problems of the 21st Century. It is becoming highly collaborative; problems as diverse as climate change, renewable energy, or the origin of gamma-ray bursts require understanding processes that no single group or community alone has the skills to address. At the same time, after centuries of little change, compute, data, and network environments have grown by 9-12 orders of magnitude in the last few decades. Moreover, science is not only compute-intensive but is dominated now by data-intensive methods. This dramatic change in the culture and methodology of science will require a much more integrated and comprehensive approach to development and deployment of hardware, software, and algorithmic tools and environments supporting research, education, and increasingly collaboration across disciplines.

Dr. Seidel was the founding director of the LSU CCT. He was appointed Director of the NSF Office of Cyberinfrastructure in 2008. He is now the NSF Assistant Director for Mathematical and Physical Sciences (MPS). MPS is comprised of the Divisions of Astronomical Sciences, Chemistry, Materials Research, Mathematical Sciences, Physics, and the Office of Multidisciplinary Activities.

