



The **I**nstitute for **P**hysical **S**cience and **T**echnology  
and  
The **D**epartment of **P**hysics  
announce



**THE 19<sup>TH</sup> ANNUAL SHIH-I PAI LECTURE**  
**TUESDAY, OCTOBER 22, 2013**

**3:00 – 3:50 pm** Reception, Rotunda, Mathematics Building

**4:00 pm** Shih-I Pai Lecture, 1412 Physics Building

**Energy and our other Natural Resources:  
Minerals, Land, Water and the Atmosphere**

Presented by:



**Ellen D. Williams**

**Distinguished University Professor  
University of Maryland, College Park  
and Chief Scientist  
BP International Ltd.**