



Cornell Laboratory
for Accelerator-based Sciences
and Education (CLASSE)

illuminating Physics!!

STANYS Spring 2014 Conference

Cornell University, 401 Physical Sciences Building (PSB)
Saturday, April 5th, 2014

- 09:00am – 09:30am Registration and Continental Breakfast
- 09:30am – 09:45am Welcoming Remarks – PSB 401
- 09:45am – 10:25am **Prof. Alex Gaeta, Applied and Engineering Physics, Cornell University.**
- 10:30am – 11:45am **CIPT Laboratory Activity: “DNA and Diffraction of Light”**
- 11:50am – 12:30pm **Prof. Matt Miller, Mechanical and Aerospace Engineering, Cornell U.**
- 12:30pm – 01:15pm Lunch
- 01:20pm – 02:00pm **Prof. Karin Limburg, SUNY College of Environmental Science and Forestry**
- 02:20pm – 03:00pm Group A: Tours CHESS/Upson Hall
- 03:20pm – 04:00pm Group B: Tours Upson Hall/CHESS
- 04:00pm – 04:30pm Closing and Evaluation – PSB 401

“DNA and the Diffraction of Light”

The diffraction and interference of light are easily observed phenomena that give direct, tangible evidence of the wave nature of light. Diffraction is at the root of many technologies, scientific techniques, and common visual phenomena. Students explore diffraction phenomena by shining a laser at a hair, a variable single slit made from pencils, and wire meshes of various sizes. After this introduction to the general principles of diffraction of light, students will use an ICE DNA Transform slide to develop an understanding of the use of light diffraction in the discovery the structure of DNA.

