

## Recent progress towards nuclear fusion in the laboratory

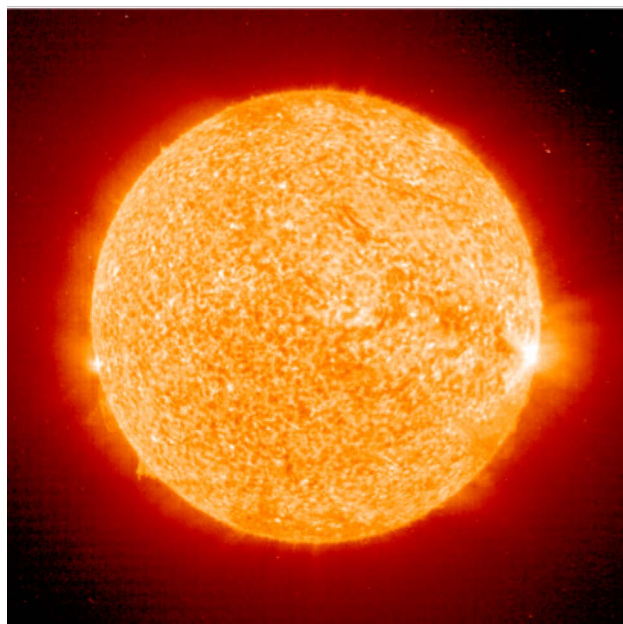


**Siegfried Glenzer**

*SLAC National Accelerator Laboratory  
Professor of Photon Science*

### **Abstract:**

The demonstration of nuclear fusion in the laboratory and eventual utilization as an unlimited energy source has been a grand challenge for physicists and engineers for 70 years. All life on earth depends on this process that powers our sun. The realization as an industrial energy source would have a tremendous impact on our society and would be the ultimate technique to combat climate change. In this talk, I will survey the National approach in the area of inertial confinement fusion and will summarize the very recent achievements in this field that include an increase in fusion energy yield by a factor of 100 since the first experiments begun on the National Ignition Facility about a decade ago. Several avenues towards fusion ignition and high yield are beginning to emerge where experiments on LCLS's Matter in Extreme Conditions instrument are expected to make major contributions to advance the field.



March 15, 2021 | Zoom | 3:30 pm - 4:30 pm