**Abstract:**

Controlled nuclear fusion has long been sought as a global energy source and ignition of a laser fusion target continues to be one of the grand scientific and technological challenges of our time. Fundamentals and requirements for this ultimate laser application will be introduced in the first tutorial lecture (*Laser Fusion for Laser Jocks*) and treated in more detail in the second lecture (*Laser science and technology for laser fusion*).

Topics in the tutorial will include: laser fusion principles, performance and technology requirements, laser fusion research programs and facilities around the world. A deeper dive in the second lecture will explore technical issues that include: frequency conversion, beam smoothing, beam shaping and wavefront correction, temporal pulse shaping, short-pulse lasers for fusion research, and current research to mitigate laser-plasma instabilities.