

## A Symposium in Honor of Professor Toshiki Tajima Inventor of Laser Wake Field Acceleration

January 25th-26th, 2018 the Laser High Field community celebrated the 70th birthday of one of its founders, mentor and inventor, Professor Toshiki Tajima at the University of California, Irvine (UCI). This renaissance man with boundless imagination has been the driving force in building connections among the domains of ultrafast optics, plasma physics, nuclear physics and astrophysics but also nuclear medicine and pharmacology. Toshiki Tajima bridged the atomic and subatomic domains, revolutionized Laser Science and established the foundation of High Field Science and Technology. He is also the co-founder and deputy Director of IZEST\* at the Ecole polytechnique (France).

His most acclaimed contribution has been the invention with John Dawson in 1979 of Laser Wakefield Acceleration (LWA). The same concept was extended to electron and proton beams, few years later by P. Chen, J. Dawson, R.WW Huff, T Katsouleas are demonstrated, at SLAC and CERN.

Toshi Tajima's socio-economic impact has been towering involving more than 100 laboratories, 2000 researchers. Toshi Tajima was particularly active in the creation of large scale facilities in Japan Kansai with KEPSI, the Extreme Light Infrastructure ELI-NP in Romania, Czech Republic, ELI-Beam Lines and Hungary, ELI-ALPS. This activity represents > \$3B investment.

Among the most prestigious awards, he received the 2015 Fermi Prize, 2013 Einstein Professorship of CAS, the Blaise Pascal Chair by the Ile-de-France and the Nishina Memorial Prize from Japan. He was elected to Russian Academy of Science in 2016. Today, using Toshiki Tajima scientific legacy the entire high field domain carries the hope to revolutionize high-energy physics beyond today's existing frontiers.

A cluster of more than 100 distinguished scientists and personalities, from around the world including Barry Barish, 2017 Nobel prize, Robert Hunter, former Reagan's Energy Director, Jacques Biot, Président of the Ecole polytechnique (France), Thierry Massard representative of the French DOE, attended the event at UCI. It was a distinguished honor to hear Barry Barish giving his 2017 Nobel Prize lecture on the detection of Gravitational Waves and his applications. Alongside, an impressive roster of more than 30 distinguished scientists, former Toshiki colleagues or students described their interaction with the honoree.

\* International Zeptosecond Exawatt Science and Technology center

