

# Stanford

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## Mark Kemp

Senior Scientist, SLAC National Accelerator Laboratory

### Bio

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#### BIO

After joining SLAC National Accelerator Laboratory in 2008, Dr. Kemp was an engineer in the Power Conversion and Electrodynamics Departments. Recent activities have included serving as manager of the developmental engineering section, project manager of the SLAC P2 Marx, and technical lead on several pulsed power and RF source projects. He is presently a Senior Staff Scientist at SLAC and is PI on two DARPA funded projects in neutron source and VLF technologies. He is also the Project Manager for a DHS funded project for a high average power linac. He is PI on a DOE funded project for next-generation high efficiency RF sources. He has also served as co-instructor for several years at the US Particle Accelerator School. He has published more than 80 journal and conference papers and has 3 patents.

Dr. Kemp was the treasurer of the 2012 IEEE Power Modulator and High Voltage Conference (IPMHVC), Technical Co-Chair of the 2014 IPMHVC, and General Chair of the 2016 IPMHVC and he currently serves on the executive committee. He is a Senior Member of IEEE.

#### EDUCATION AND CERTIFICATIONS

- PhD, University of Missouri , Electrical Engineering (2008)

#### PATENTS

- Mark Kemp, Matt Franzi, Erik Jongewaard, Andy Haase, Emilio Nanni. "United States Patent Pending Piezoelectric Transmitter", Sep 1, 2017
- Mark Kemp, Matt Franzi, Erik Jongewaard, Andy Haase. "United States Patent 16/121158 Piezoelectric Particle Accelerator", Leland Stanford Junior University, Aug 1, 2017
- Mark Kemp. "United States Patent 9177748 Pulsed Depressed Collector", Leland Stanford Junior University, Nov 3, 2015

#### LINKS

- Article on ILC Marx work: <http://newslines.linearcollider.org/2012/03/15/slac-p2-marx-ramps-up-reliability/>