

## Phillip Sprangle, Short CV (2019)

### Phillip Sprangle

Professor of Electrical & Computer Engineering (ECE) and Physics,  
Institute for Research in Electronics and Applied Physics (IREAP) (sprangle@umd.edu.)  
Emeritus Scientist, Naval Research Laboratory

### Educational Background:

1973, Ph.D., Applied Physics, Cornell University

### Other Employment:

- 1) Appointed to a Scientific and Technical (ST) position, Senior Scientist for Directed Energy Physics (1988-1990), (2008-2015)
- 2) Head, Beam Physics Branch, NRL (1980-2011)
- 3) Appointed to a Senior Executive Service (SES) position (1990-2008)

### Fellowships:

- 1) 2010, Optical Society of America, OSA
- 2) 2005, Directed Energy Professional Society, DEPS
- 3) 1997, Institute of Electrical and Electronic Engineers, IEEE
- 4) 1981, American Physical Society, APS

### Awards, Honors and Recognitions:

- 1) Presidential Rank Award, OPM, (2015) (highest government award bestowed to a civilian)
- 2) Advanced Accelerator Concept Prize, IEEE (2014)
- 3) James Clerk Maxwell Prize, APS (2013)
- 4) Fred E. Saalfeld Award, (highest scientific award bestowed by ONR) (2012)
- 5) Navy Meritorious Civilian Service Award, (2011) (highest NRL scientific award)
- 6) NRL Technology Transfer Award, (2004 and 2009)
- 7) Alan Berman Research Publication Awards, (1974,1975,1979,1992,1999,1998,2002,2009)
- 8) IEEE Plasma Science Award (2008)
- 8) Top Navy Scientist and Engineer of the Year Award (2008)
- 9) HEL Best Paper DEPS Award (2008)
- 10) Sigma Xi Pure Science Award, (Edison Chapter) (1994)
- 11) International Free Electron Laser Prize (1991)
- 12) Washington Technology's Top Ten Talents (1989)
- 13) E. O. Hulburt Science and Engineering Award (1986)
- 14) Author of four of "NRL's 100 most cited papers"

**Publications/Patents:** Over 300 publications, 20 patents, H-Index 59 and over 13,000 Citations

### Research Areas of Current Interest:

- 1) Particle and optical Beam physics, 2) Ultra short pulse laser matter interaction and atmospheric propagation, 3) High-energy laser atmospheric propagation, 4) Free electron lasers, 5) Laser-driven plasma accelerators, 6) Nonlinear optics, 7) Nonlinear plasma physics, 8) Detection of chemical/biological agents and radioactivity, 9) THz sources.