

## PLASMA BASED ACCELERATORS: STATUS, FUTURE POTENTIAL AND PLANS

WIM LEEMANS

DESY, Hamburg, Germany

We will discuss the progress on building laser powered, plasma based particle accelerators where electrons surf on waves and can reach energy levels in a few 10's of cm that, if one relies on conventional methods, would require machines multiple football fields long. Although many challenges remain, this new technology is at the brink of offering a profoundly different way in which we may build the next generation of particle accelerators. Development of high average power and high peak power lasers will be essential for their deployment into laboratories and broader applications.

FRIDAY,  
12.07.2019

2:00 PM

CFEL  
SEMINAR ROOMS I-III

