

## Prospects for proton-driven plasma acceleration

*Thursday, 15 October 2015 12:25 (20 minutes)*

Proton beams are the most promising driver of wakefields to accelerate electrons to very high energy in a single plasma cell. After a brief review of the physical principles, the (AWAKE) experiment at CERN will be described and its current status will be presented. Further considerations for a future proton-driven plasma wakefield accelerator will be discussed.

**Primary author:** CALDWELL, Allen Christopher (Max-Planck-Institut fuer Physik (Werner-Heisenberg-Institut) (D))

**Presenter:** CALDWELL, Allen Christopher (Max-Planck-Institut fuer Physik (Werner-Heisenberg-Institut) (D))

**Session Classification:** Wakefield Acceleration/Deceleration with existing large Facilities at 100 GeV

**Track Classification:** Presentations